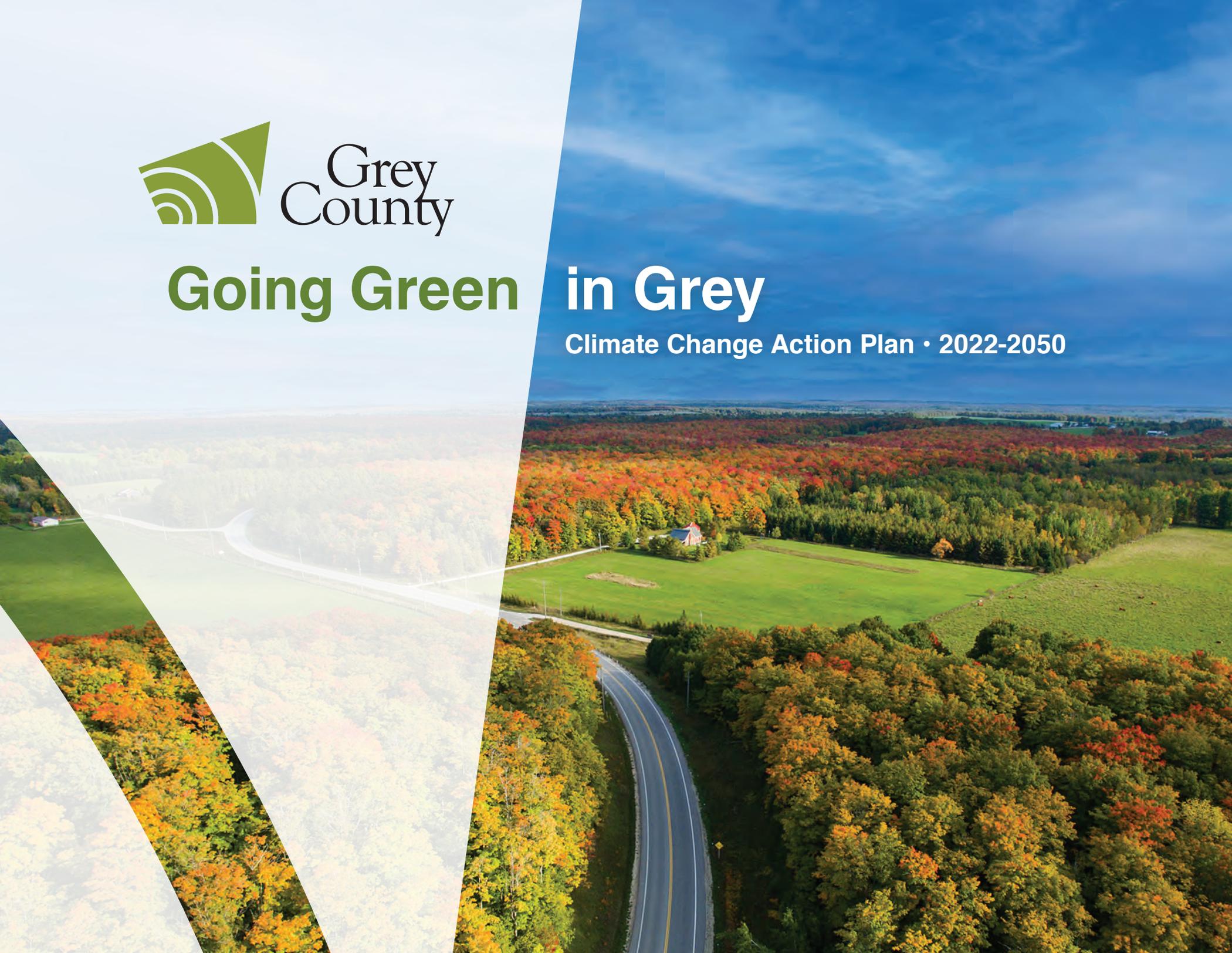




Going Green

in Grey

Climate Change Action Plan • 2022-2050



Greetings From Our Warden

The decisions we make and the actions we take each day have an impact on the world around us. The evidence is undeniable that our climate is changing and it's up to all of us – as governments, businesses, and individuals – to act boldly and make necessary changes to limit the rate of global warming. In response, Grey County has declared a Climate Emergency, and implementing this Climate Change Action Plan is a major step forward in our own sustainable future in Grey County.

As a former Top 7 Intelligent Community recipient, we want to build on our reputation as a forward-thinking and innovative community. We want to be leaders in climate action by embracing new technology and modern practices. We also need to be prepared, ensuring our services and our communities are ready for challenges that will come our way through climate change. Through this Plan, we hope not just to inform, but to inspire our community to act against climate change and find inclusive solutions that leave nobody behind.



Climate change may very well be the biggest challenge we face in our lifetime. Let's all do our part.

Selwyn 'Buck' Hicks
2022 Grey County Warden





Going Green in Grey

Climate change is a critical global problem that requires urgent action. In just one generation, we've seen its effects in Grey County through increased flooding, extreme heat, snowstorms and other severe weather events. Our community is projected to grow to nearly 125,000 residents by 2046 – more people means more emissions-producing actions and the potential for increasing climate change impacts.

What will we leave for future generations?

Grey County recognizes the need to proactively address the issue: this **Action Plan** highlights activities that contribute to climate change and realistic and actionable steps we can take to reduce greenhouse gas pollution and its harmful effects.

By working together, we can create a sustainable, prosperous and healthier future in Grey County.



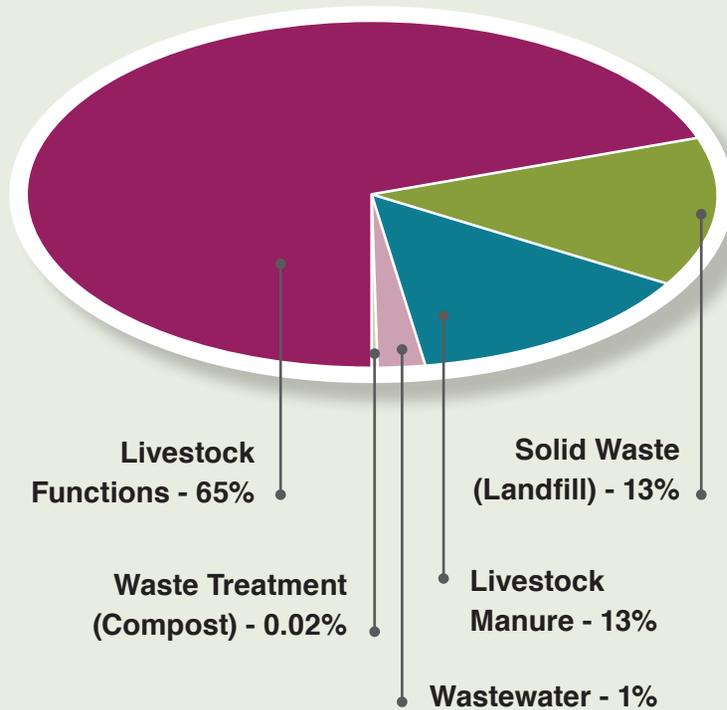
Greenhouse gas (GHG) pollution generated in Grey equals **8 tonnes** per resident each year *(that's like flying from New York to Paris – and back – four times!)*



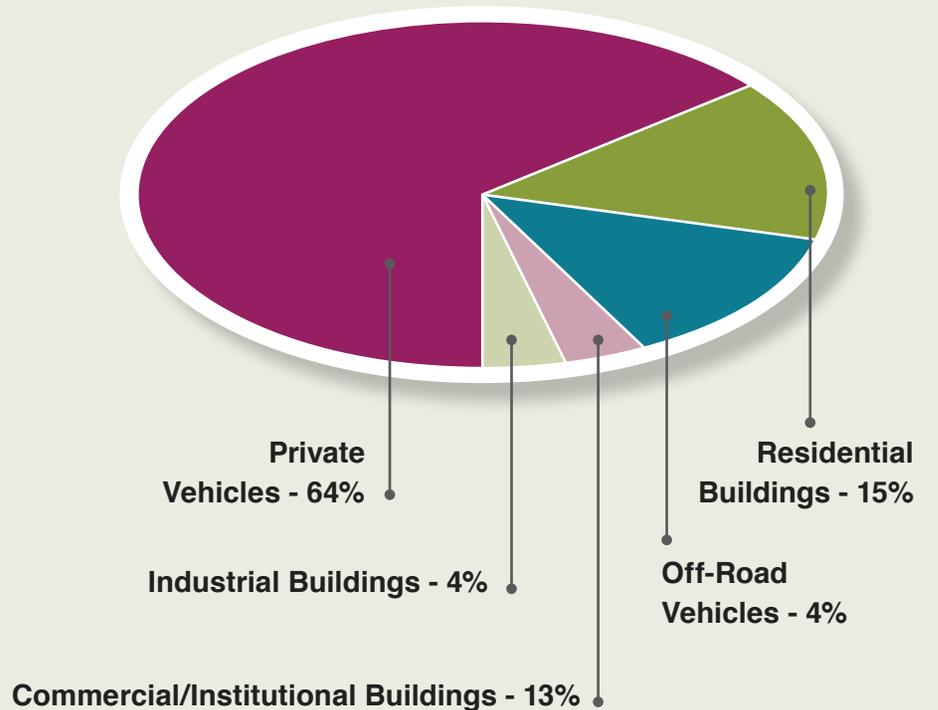
GHG Pollution in Grey

Greenhouse gases are produced through dozens of everyday activities. Large amounts of energy are necessary to light up and heat and cool buildings in our community. We rely heavily on vehicles to move around. The operation of farms, manufacturers and businesses generate emissions. Residents create garbage and other waste that add to the total.

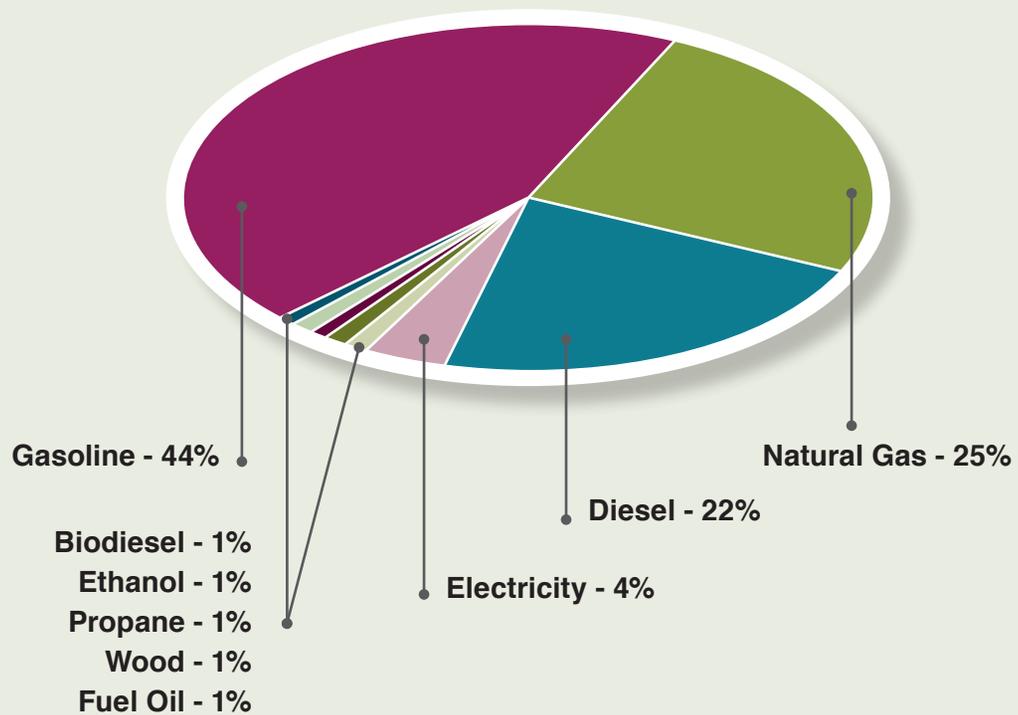
GHG Emissions from Waste, Agriculture and Land Use (2018)



GHG Emissions from Fossil Fuels (2018)



GHG Emissions by Fuel Type (2018)



A Green Future

Vision

The County of Grey is a clear and visible climate change leader; taking actions to address climate change throughout municipal operations and in the community. By embracing energy conservation, innovative and nature-based solutions, promoting awareness, and working with residents and businesses, Grey County is creating a more prosperous, sustainable and healthier future that is equitable, accessible and inclusive of urban and rural lifestyles.

Goals

30% reduction in community greenhouse gas emissions by 2030

Community GHG emission reductions targets of 15% by 2026, 30% by 2030, 50% by 2035, 60% by 2040, 75% by 2045 and net-zero by 2050

40% reduction in greenhouse gas emissions from Grey County operations by 2030

Corporate GHG emission reduction targets of 20% by 2026, 40% by 2030, 55% by 2035, 70% by 2040 and net-zero by 2045

Net-Zero community greenhouse gas emissions by 2050

Net-Zero Grey County operations greenhouse gas emissions by 2045

Climate change reaches into every corner of our community, and we all have a role to play.

The Risks of Inaction...

On a global scale, the last five years have been the hottest on record since 1850 and Ontario is warming at a rate of 1.3 degrees per century. Without climate change action, this warming can lead to harmful effects in our community:

Increased health and safety risks from heat stress, disease and extreme weather

In Grey, Bruce and Huron: by 2050, we may see 20 more days each year when the temperature hits 30°C+

Poor air quality that reduces life expectancies and quality of life

Damage to homes, roads and critical infrastructure from extreme weather

In Grey, Bruce and Huron: the risk of heavy rainstorms will be twice as frequent by 2050

Species extinction and destruction of habitats

Conflict over resources such as food and water

Lack of clean, consumable water

In Grey, Bruce and Huron: drought can lead to low water levels

Increased water, energy and housing costs

Food shortages and increased prices

In Grey, Bruce and Huron: we may see delays in planting and harvesting from heavy rain and flooding

Climate Action Community Benefits

The Climate Change Action Plan will provide financial, environmental, and social benefits to Grey County. Our municipalities, businesses and the local economy will all be stronger when we achieve our collective emission goals.

Community Benefits

- ✓ Healthier local and global environments
- ✓ Improved food security
- ✓ Improved housing quality
- ✓ Improved physical and mental health
- ✓ More reliable power/energy
- ✓ Preservation of healthy green spaces and water



11%
of households

in Grey and Bruce counties
experience food insecurity



1 in 5 children

in Grey County and Bruce counties live in a
low-income home (children are at particular risk of
negative effects from food insecurity)

Economic Benefits

- ✓ Increased access to knowledge, expertise and networks related to energy innovation
- ✓ Increased employment opportunities
- ✓ Increased sustainable tourism
- ✓ Local, regional, national and international recognition
- ✓ More diverse, resilient and competitive local economy
- ✓ Reduced energy costs



43% of Grey residents
(more than twice the Canadian average)

have high home energy costs
(spending 6% or more of their income on energy)



A Made-In-Grey Approach



Action 1: Forest, Habitat and Biodiversity Protection and Expansion

Protect our natural assets:

- Create urban forest management plans and tree cutting by-laws
- Develop and enhance natural heritage areas and critical wildlife and pollinator habitats
- Expand and promote naturalization programs in planning processes
- Explore green/natural assets to replace traditional “grey” infrastructure
- Monitor and protect Grey-owned forests, natural assets, green spaces, wetlands and ecosystems
- Provide incentives to encourage naturalization and tree planting
- Support tree preservation and planting programs, and hedgerows/fencerows

By 2050, plant **5 million** trees in Grey County
(or equivalent carbon sequestered through habitat and biodiversity protection)



Action 2: Conservation and Protection of Wetlands

Identify wetlands at risk and encourage conservation and water protection:

- Improve and expand wetland evaluation and mapping
- Promote the importance of ecological features and alternatives to tile drainage
- Support watershed monitoring and reporting activities



Action 3: Capacity Building in Sustainable Agricultural Best Practices

Support ongoing knowledge-sharing, innovative programming and new income streams:

- Develop materials, on-farm demonstrations and pilot and research projects
- Improve sustainability, manure management and nutrient loss, programs and guidelines
- Provide incentives for sustainable and regenerative practices to increase the capture of carbon dioxide (collect and store in plants and soil)
- Reduce methane production and improve animal digestion
- Restore degraded lands and convert marginal farmlands



60%

natural land for pasture



90%

cropland



50%

manure

are under best management practices to minimize GHG pollution and maximize capture carbon by 2050



By 2050 **30% of solid waste** and **50% of organic waste** is diverted from landfill



Action 4: Local Food Promotion

Promote local food:

- Enable connections with local producers
- Explore “Grown-in-Grey” identification system
- Integrate climate action in the local food strategy
- Promote local food, providers and distributors
- Support extended hours and/or additional days for farmers’ markets



Action 5: Waste Diversion

Reduce methane emissions through sustainable waste management:

- Collaborate with businesses on recycling and re-use pathways
- Encourage new and existing food waste diversion initiatives and local food repurposing
- Increase backyard composting and education and awareness programs
- Promote community waste diversion initiatives and re-use events
- Support waste diversion initiatives and resource-sharing in municipalities





100% of vehicles
in Grey County are
zero-emission by 2050



Action 6: Re-Use/Re-Build It Operations

Support business and organizations that repurpose building and construction materials:

- Connect County's new residential building retrofit program to re-use/rebuild initiative
- Explore and support a community tool library
- Promote through education and awareness initiatives to residents, developers and contractors



Action 7: Zero-Emission Vehicles

Encourage the adoption of electric vehicles (EVs):

- Advocate for provincial and federal funding of EV infrastructure and incentives
- Explore a County-wide electric car share program
- Promote Grey County as an EV-friendly destination
- Support educational programs related to EV adoption and information



Action 8: Active Transportation

Encourage residents to walk, bike or use mobility devices instead of single-person cars:

- Add bike routes and multi-use roadways and expand trail connectivity
- Explore alternative transportation such as electric bicycles
- Maintain and/or add bicycle racks, sidewalks, pedestrian walkways, road-crossings and signage to create “complete streets”
- Promote active transportation through the community and to County employers
- Support complete and compact development where residents can meet everyday needs close to home

40% of short trips (15 minutes or less) are walked or biked by 2050



Action 9: Bus, Ride Share and On-Demand Transit

Expand bus services and develop ride share programs:

- Consider fee-supports for low-income residents
- Establish new and/or support ride share services
- Explore federal funding to support zero-emissions transit solutions
- Monitor and expand Grey Transit Route service



Action 10: Compact, Mixed-Use Development

Prioritize higher-density, mixed-use development:

- Encourage denser residential areas with multi-unit construction, infilling (new homes on vacant or underused land), additional residential units and brownfield redevelopment
- Increase focus on mixed-use development including affordable housing
- Integrate climate projections and green infrastructure in land-use planning
- Provide incentives for development on brownfield sites
- Support municipalities on compact, mixed-use development



Action 11: Green Standard for New Buildings

Develop and implement green development standard with local municipalities:

- Adapt the green development standard of Ontario communities for Grey County
- Create tools and resources to support developers
- Integrate green development standard and metrics into existing plans
- Introduce incentives to encourage higher-efficiency standards



Net-Zero Ready

All new buildings by 2030



Action 12: Residential Building Energy Retrofit

Implement a residential energy retrofit program for existing buildings:

- Create an education and awareness campaign
- Develop retrofit funding options and advocate for federal and provincial support
- Encourage trade programs for energy efficiency construction
- Prioritize low-income households and buildings not already connected to natural gas
- Promote existing financial supports for those experiencing energy poverty



Action 13: Non-Residential Building Energy Efficiency Retrofit

Implement a commercial/institutional energy retrofit program for existing buildings:

- Advocate for greater program support at the provincial and federal levels
- Create an education and awareness campaign
- Develop resources, tools and a retrofit program for the agricultural community
- Facilitate the sharing of best practices in energy among businesses
- Include efficiency incentives and financing for business owners
- Promote retrofit programs and funding streams



84% homes
are retrofitted by 2050,
resulting in an average efficiency gain of
40%+ per project



Action 14: Renewable and Emerging Energy Technologies

Support energy innovation and the development of renewable energy:

- Explore green jobs training programs
- Include solar design guidelines as part of the green development standard
- Prioritize solar installations on brownfields, parking lots and less ecologically sensitive lands
- Provide clear direction on renewable energy procedures, regulations and permits
- Remove barriers to renewable energy development in bylaws, policies and procedures

90% of buildings (institutional and commercial) are retrofitted by 2050

By 2030 **15% of residential** roofs have solar panels



Action 15: Biogas Capture and Conversion

Support biogas production across Grey County and in the agricultural sector:

- Collaborate with partners and members of the agricultural community on a biogas cooperative
- Promote biogas in collaboration with regional and community partners

13,000,000 m³ of renewable natural gas is produced by 2030



Action 16: Climate Adaptation Plan

Increase our community's climate resilience, minimize exposure to the impacts of climate change and take advantage of new opportunities:

- Identify how climate change will impact key economic sectors
- Include climate projections in emergency planning activities
- Increase local education and awareness of climate change
- Protect and enhance natural assets and adopt more nature-based solutions





Action 17: Reduce Flood Risk

Identify and strengthen areas that are prone to flooding:

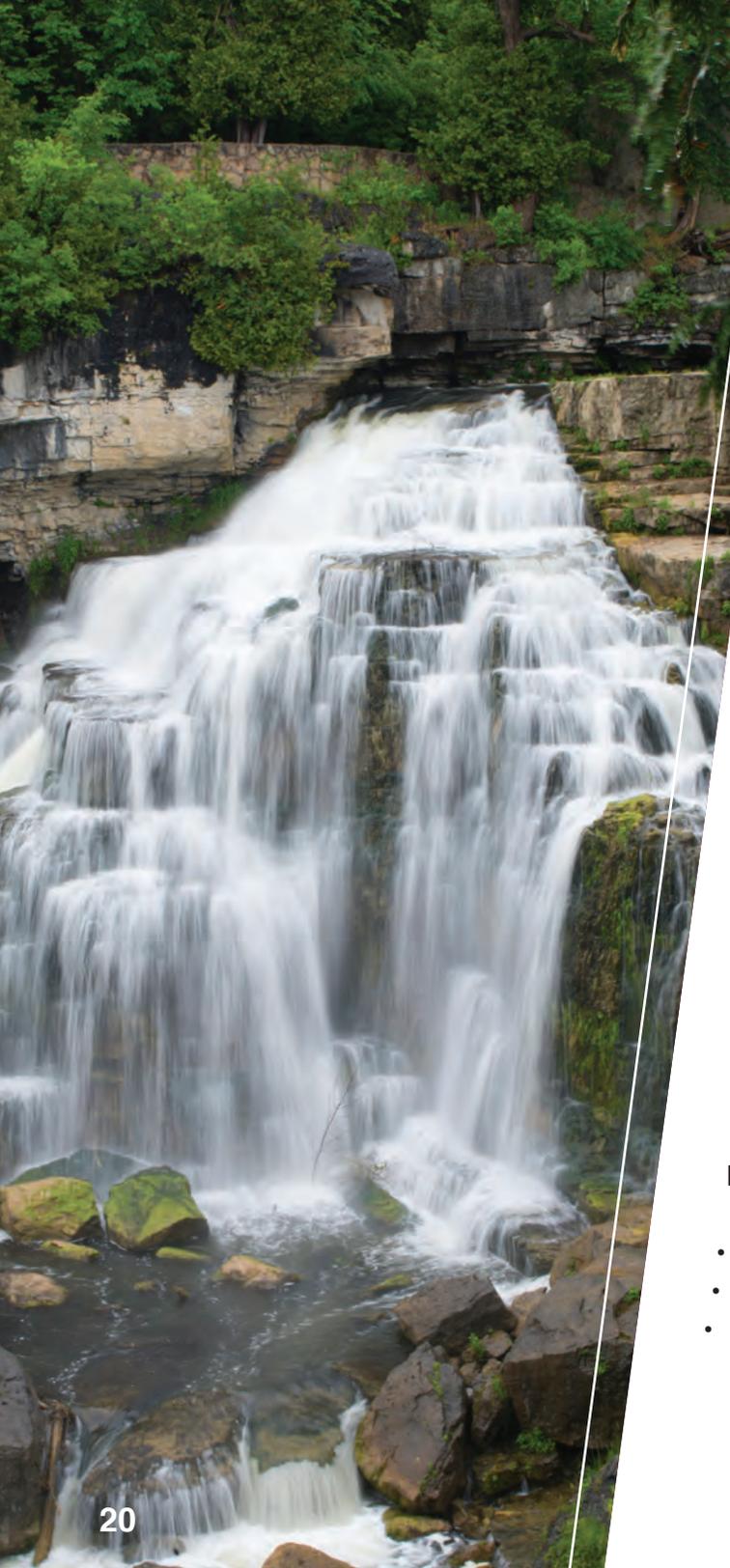
- Collaborate with Conservation Authorities on mapping drainage and water flow
- Develop resources, guidelines and educational materials on flooding
- Support conservation of natural infrastructure and encourage green infrastructure



Action 18: Prevent Shoreline Erosion

Manage shorelines in partnership with local Conservation Authorities:

- Monitor shoreline health
- Provide resources to private landowners about best management practices
- Promote tree planting and other nature-based solutions
- Strengthen mapping and policies that protect shorelines



Action 19: Climate Action Engagement Program

Develop an educational and awareness program for residents and businesses:

- Develop educational materials on climate action (including energy conservation, waste reduction, and active transportation practices), carbon footprints and climate justice
- Establish volunteer opportunities for residents to get involved and take action
- Provide information and updates on County climate change action



Action 20: Sustainable Tourism Programs & Incentives

Establish Grey County as a sustainable, low-carbon destination:

- Advance external investment in sustainable tourism
- Engage tourism operators in retrofit and green standard programs
- Highlight active transportation opportunities, trails and infrastructure
- Promote sustainable tourism funding and agri-tourism opportunities



Action 21: Climate Action Advisory Group

Establish a Climate Action Implementation Advisory Group:

- Convene a Group with a variety of expertise and lived experience
- Engage the Group on ongoing implementation of this Action Plan and annual reporting
- Represent the diversity of Grey County, including youth and the Indigenous community

Potential GHG Emissions Savings

We have real opportunity to make a positive impact both within our households and community and more broadly. In 28 years (or just one generation) we could:

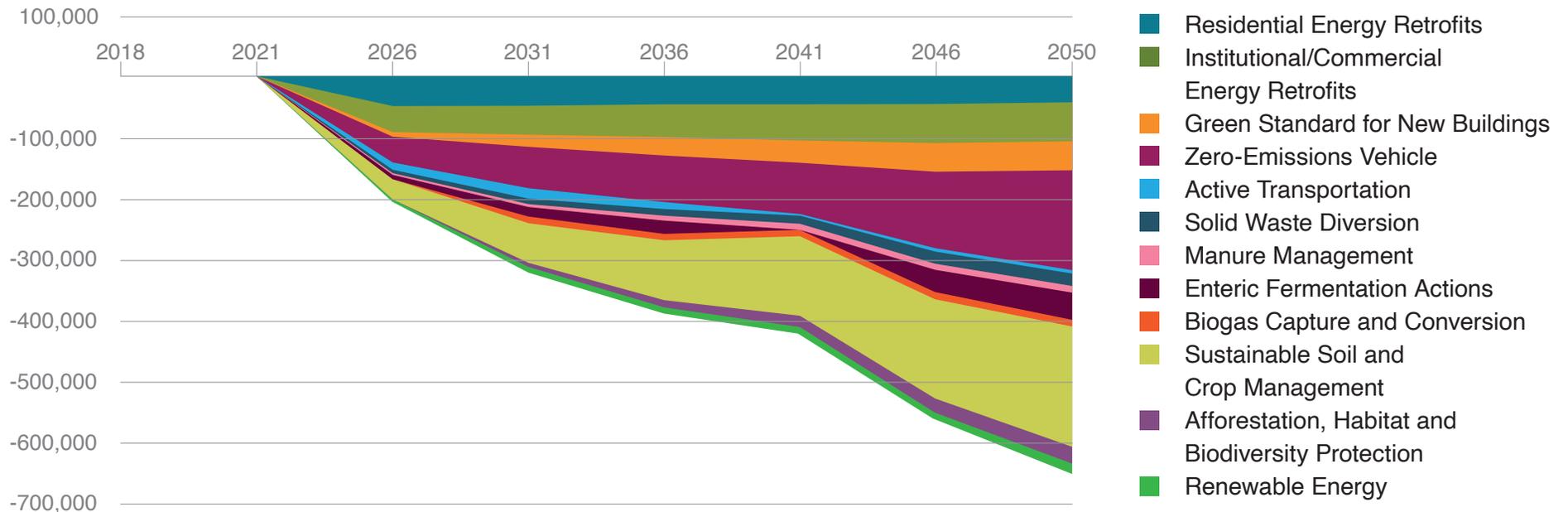
Produce **11,145,200 FEWER** tonnes of GHGs

Decrease energy consumption each year by **61%**

Realize **\$2.4 billion** in energy cost savings

Broken down by community action, we see potential across all sectors:

Aggregated Emission Reduction of Community Actions to 2050



Leading by Example

In addition to community emissions, Grey County operations and staff generate waste, and its buildings, vehicles and assets add around 3,900 tonnes of emissions each year. To reduce this, the County will implement its own actions:

Action 1: Energy Efficient New Buildings – Implement the highest tier of the green development standard to build net-zero ready municipal offices and facilities by 2025.

Action 2: Retrofit all existing Grey-owned facilities by 2045

Action 3: Residential Demonstration Building – Create a net-zero residential demonstration building of design, construction and technology that meet the highest tier of the green development standard and retrofit recommendations.

Action 4: 1.78 MW of solar installations, or equivalent energy technology, are installed by 2030 to power Grey-owned buildings

Action 5: Outdoor Lighting Conversion to LEDs – Retrofit outdoor lighting (such as traffic signals and street lighting) from incandescent to light emitting diode (LED) bulbs.

Action 6: Reduce Single Passenger Commuting & Private Vehicles – Encourage municipal staff to carpool, use active transportation and telecommute.



Action 7: Operational changes, anti-idling and improved vehicle maintenance will result in 10% less fuel consumption by County vehicles and equipment

Action 8: Zero Emission Fleet Vehicle Adoption – Purchase electric vehicles and equipment when existing equipment and vehicles are replaced.

Action 9: Corporate Waste Reduction Program – Conduct a waste audit and develop policies that minimize waste from facilities and operations.

Action 10: Collaborate with Member Municipalities to Support Wastewater Efficiency – Implement operational improvements that increase energy efficiency at wastewater facilities (such as equipment upgrades, operational modifications and retrofits).

Action 11: Develop Municipal Climate Lens – Review all policies, plans and initiatives to ensure climate considerations are prioritized.

Action 12: Retain a Climate Change Initiatives Manager – Secure a climate change initiatives manager to oversee the implementation of this Action Plan, the advisory group and climate change task force, as well as partnerships with key stakeholders and Indigenous communities.

Action 13: Culture of Conservation – Promote a general culture of conservation with events, awards, benefits and other programs and develop resources, guidelines and educational materials on waste reduction measures.



Potential Corporate GHG Emissions Savings

Produce **93,700 FEWER** tonnes of GHGs
Realize **\$49.7 million** in total energy cost savings
Decrease energy consumption by **100%**

We're on Our Way

While we need to address all aspects of climate change, we can't do everything at once. Where can we get the most 'bang for our buck' in terms of greenhouse gas pollution reduction and benefit to the community?

We've identified several priority actions to address first. These **4 Foundational Pillars** are already underway and can collectively realize 40% of our emissions reduction goals if they are continued and expanded upon. We are on our way – with a lot more still to come.



**Action 1:
Forest, Habitat
and Biodiversity
Protection and
Expansion**



**Action 3:
Capacity
Building for
Sustainable
Agriculture**



**Action 5:
Expand Waste
and Organics
Diversion**



**Action 10:
Compact
Mixed-Use
Development**

What's Next?

While each step is important, we have selected **5 Key Next Steps** that, if realized, will allow the County to **achieve 39% of its goal emissions reduction potential**:



**Action 7:
Accelerate Zero
Emissions
Vehicle Adoption**



**Action 11:
Green Standard
for New
Buildings**



**Action 12:
Residential
Building Energy
Efficiency
Retrofit Program**



**Action 16:
Develop Climate
Adaptation Plan**



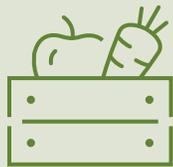
**Action 19:
Establish a Climate Action Engagement Program**

These **4 Pillars** and **5 Next Steps** equal **79%** of our greenhouse gas reductions

How You Can Help

Every small action contributes to a bigger success in emissions reduction, especially when we work together. Connect with friends and neighbours on our sustainable future and share your climate actions. Be a part of the solution – here are 10 things you can do *right now*:

NATURALIZE
your garden
with native
plants or
**grow your
own food**



1

Choose **local**
producers and
LOCALLY-GROWN
food



2

Waste less food:
buy only **WHAT**
YOU NEED TO



3

SHOP
second-hand
and **donate**
old clothes



4

Re-use
or **repair**
items
RATHER than
trash them



5

Replace
OLD APPLIANCES
with Energy Star
products



6

Drive less,
CARPOOL
more
(or choose
Grey Transit)



7

Insulate your
home and when
replacing heating
and cooling
systems, choose
low-carbon
options like
HEAT PUMPS



8

Walk, ride your
bike, or **roll** for
short trips



9

Talk to neighbours,
family and friends
about CLIMATE
CHANGE;
take action
together



10

**Learn more about
what you can do –**
at home, at work
and in the
community at
grey.ca/climateaction

Our Thanks

This Action Plan was developed in consultation with stakeholders from a variety of sectors as well as the general public. Hundreds of residents and stakeholders shared their time, ideas and expertise. Grey County would like to gratefully acknowledge everyone who participated in its development. The Plan's development was guided by the Climate Change Taskforce, supported by internal and external working groups, and informed by the Local Municipal Climate Change Community of Practice.

Land Acknowledgement

We acknowledge with respect, the history, spirituality, and culture of the Anishinaabek, Six Nations of the Grand River, Haudenosaunee, and Wendat-Wyandot-Wyandotte peoples on whose traditional territories we gather and whose ancestors signed Treaties with our ancestors. We recognize also, the Metis and Inuit whose ancestors shared this land and these waters. May we all, as Treaty People, live with respect on this land, and live in peace and friendship with all its diverse peoples.



grey.ca/climateaction