

Report To: Committee of the Whole Meeting

Meeting Date: November 30, 2021

Report Number: CSOPS.21.082

Title: Municipal Response to the Climate Emergency Declaration **Prepared by:** Jeffery Fletcher, Manager of Sustainability & Solid Waste

A. Recommendations

THAT Council receive Staff Report CSOPS.21.082, entitled "Municipal Response to the Climate Emergency Declaration";

AND THAT Council endorse the Town's re-initiating its participation in the Partners for Climate Protection (PCP) milestone process by acknowledging and setting a municipal greenhouse gas reduction target for Milestone 2, by continuing to work through the remaining Milestones, and by committing to regular corporate greenhouse gas emission inventories;

AND THAT Council endorse the development of potential policy areas outlined below and in consultation with Town departments and the Sustainability Advisory Committee to reduce corporate-scope greenhouse gas emissions, with draft policies to be brought to Council for future approval:

- 1) Develop a Net Zero Carbon municipal building policy;
- 2) Create a policy that requires waste management plans for Town facilities and municipal building deconstruction;
- 3) Create a long-term plan to transition the Town's fleet of vehicles into electric vehicles and plan for charging infrastructure to charge fleet vehicles at Town facilities; and,
- 4) Develop a tree and naturalization policy for municipally-owned lands and investigate methods of assessing carbon sequestration.

B. Overview

On October 21, 2019, Town Council endorsed a Declaration of a Climate Emergency. This declaration committed Council and Town staff to consider opportunities to address the climate change emergency through strategic planning, budgeting, capital investments and other expenditures, planning, and community engagement. This report describes the current context

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of the climate change emergency, local/regional planning and target-setting, and seeks Council's direction on several proposed next steps that the Town can explore to reduce corporate greenhouse gas emissions.

C. Background

According to a 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report and IPCC's Sixth Assessment Report released in August 2021, the human link to rising GHG emissions and the impacts of global warming are 'unequivocal'. With the planet effectively locked-in to at least 1°C of warming, the IPCC has stated that governments need to take more urgent action or risk levels of warming that will bring much greater negative impacts. In the 2018 Special Report, the IPCC estimated that global warming was likely to reach 1.5°C between 2030 and 2052¹, and with the more recent Sixth Assessment Report (AR6), it is now expected that 1.5°C will be reached in the early 2030s unless global greenhouse gas (GHG) emissions can be reined in significantly (IPCC, 2021c).

Keeping global warming to less than 1.5°C is vital to reduce the intensity and frequency of extreme temperatures and weather influenced by climate change. The impacts of climate change have already affected, and continue to affect, communities around the world with heat waves, extreme precipitation and flooding, high winds including more cyclones and hurricanes, and droughts². According to the Climate Atlas of Canada³, the Owen Sound region (which includes The Blue Mountains and nearby municipalities in Grey, Bruce and Simcoe Counties) can expect to experience many of these impacts, including, but not limited to:

- Increased mean temperatures and precipitation levels across all seasons, including noticeably warmer and wetter winters;
- An increase from an average of six extreme heat days/year (>30C) prior to 2005, compared with an average of 15-17 extreme heat days before 2050, and 24-39 extreme heat days/year from 2051-2080. The lower projections assume a low carbon emissions

¹ Masson-Delmotte, V., et al. IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, World Meteorological Organization, Geneva, Switzerland, 32 pp., https://www.ipcc.ch/sr15/chapter/spm/

² Headline Statements from the Summary for Policymakers, Sixth Assessment Report, 9 Aug. 2021,

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC AR6 WGI Headline Statements .pdf

³ Prairie Climate Centre Staff. Climate Atlas of Canada, N.d, https://climateatlas.ca/map/canada/

scenario, and the higher projections assume a scenario of continued high carbon emissions;

- Increased summer heat also brings an increase in the risk of tropical nights (when nighttime temperatures do not drop below 20C); and,
- A longer frost-free season with increased likelihood of later first fall frosts and earlier final spring frosts.

While the Sixth Assessment Report makes the impacts of continued GHG emissions and resulting global warming clear and provides increased certainty as compared to the Fifth Assessment Report⁴ (released in 2013), the authors are certain that near-term emissions reductions, with specific emphasis on the need to reach 'net zero' emissions, can greatly reduce the rate of warming and possibly even work to reduce surface temperatures over time⁵.

As the IPCC's 2018 & 2019 Special Reports emphasized the urgent need for action to limit warming to 1.5C, municipalities across Canada and around the world increasingly began declaring climate change emergencies. The Town of The Blue Mountains joined this movement when Council passed a motion for a Declaration of a Climate Change Emergency on October 21, 2019. The purpose of this declaration was to enhance and accelerate action on the Town's commitment to protect the community, economy, and ecosystems from the impacts of climate change. At the time of this declaration, hundreds of Canadian municipalities, including Grey Highlands and West Grey, had already declared Climate Change Emergencies, and many more such declarations have been made since.

The regulations and standards that municipalities abide by, and some of the funding for municipal infrastructure, comes from provincial and federal levels of government. Still, municipalities have influence over roughly 50% of Canada's GHG emissions (FCM, 2021a), and are well-positioned to reduce local GHG emissions by setting planning policies and local strategies, supporting local and regional partnerships, advocating for the community with upper levels of government and motivating broad community action. The Town has a key role to play in supporting community emissions reductions across residential, institutional/commercial/industrial (ICI) and agricultural sectors, transportation, and waste. Municipalities are also responsible for their own GHG emissions and may lead by example and demonstrate a commitment to reducing corporate GHG emissions. In order to make progress on local GHG reductions, targets must be established and inventories of GHG emissions must be prepared. Many municipalities undertake annual or bi-annual inventories of their corporate emissions, and may perform community-level GHG inventories less regularly (e.g. every five

⁴ Headline Statements from the Summary for Policymakers, Sixth Assessment Report, 9 Aug. 2021.

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC AR6 WGI Headline Statements .pdf

⁵ Carbon Brief Staff. In-depth Q&A: The IPCC's sixth assessment report on climate science, 9 Aug. 2021, https://www.carbonbrief.org/in-depth-qa-the-ipccs-sixth-assessment-report-on-climate-science

years) if satisfactory effort is not already undertaken on behalf of municipalities at the regional/county level.

The Partners for Climate Protection (PCP) program is a national network of over 400 municipalities with the shared goal of acting to reduce local greenhouse gas emissions⁶. The PCP Program is run by the Federation of Canadian Municipalities (FCM) and ICLEI - Local Governments for Sustainability Canada (ICLEI Canada) and provides municipalities with a framework and toolset to establish GHG emissions reduction targets and monitor their progress over time. The PCP Program is a five-milestone program with separate inventory systems for corporate and community-scope emissions. The five PCP milestones are as follows:

- 1. Create a Baseline Emissions Inventory and Forecast
- 2. Set Emissions Reductions Targets
- 3. Develop a local action plan
- 4. Implement the Local Action Plan
- 5. Monitor progress and reporting results

In 2007, the Town established GHG emissions inventories for both corporate and community scopes with a baseline year of 2005, and reported these baseline inventory results and a forecast of 'business-as-usual' emissions to the PCP program, satisfying Milestone 1. The Town's 2010 Sustainable Path (sustainability plan) and the Town's 2019 Energy Conservation and Demand Management Plan, set respective community and corporate GHG reduction targets and outlined actions to reduce some of the Town's GHG emissions; however, these steps have not been reported to the PCP program. This represents a missed opportunity to establish and communicate the Town's commitment to climate change mitigation by achieving successive PCP milestones.

The Town's Strategic Plan for 2020 – 2024 recognizes the importance of addressing the Town's declaration of a Climate Change Emergency. A climate emergency declaration was endorsed by Council at the October 21, 2019 Council Meeting following a Notice of Motion in the September 30, 2019 Council meeting and many expressions of support from community members. Action 3.5 in the Strategic Plan asks for a staff report to interpret the Town's Climate Change Emergency Declaration, including a review by staff of the Town's initiatives to support this commitment and for public consultation on this topic. This staff report (CSOPS.22.001) aims to satisfy this Action, by addressing key components of the Town's Climate Change Emergency Declaration, quoted in the list below and followed by quick summaries of how this staff report will address them:

"That Council will lead by example by providing direction to staff through the Town of
The Blue Mountains Strategic Planning and Budgeting processes, as well as planning for
capital investments, to take into consideration Climate Change impacts, mitigation
strategies and alternative energy sources that decrease dependence on fossil fuels"

⁶ Federation of Canadian Municipalities. Partners for Climate Protection, n.d., https://fcm.ca/en/programs/partners-climate-protection

- This Report outlines a shortlist of actions that staff propose to pursue, such as a Net Zero Carbon municipal buildings, and more.
- "That all decision making regarding future expenditures takes into consideration climate change impacts, including but not limited to the purchase and maintenance of heavy equipment and vehicles, energy sources and usage, preservation, protection and maintenance of trees, water, shoreline, escarpment, hazard lands, parkland and greenspace, park maintenance, snow removal-salt/ice mitigation, landfill management, water treatment and capital infrastructure"
 - GHG emission reduction targets, along with regular corporate GHG accounting and participation in the PCP program, are key foundational actions to ensure accountability of Town decision making to addressing the climate change emergency.
 - Climate change considerations are currently included in the Town's asset management work, and staff will explore frameworks to guide a potential adaptation planning process for all Town assets. Community-wide adaptation can be pursued in partnership with the County and neighbouring municipalities.
- "That Council request a staff report on everything that is currently being done to address Climate Change be brought forward to the Sustainability Advisory Committee prior to budget"
 - Local and Town actions to address climate change are included in the 2019
 Energy Conservation and Demand Management Plan and in the Integrated
 Community Sustainability Plan's Phase 1 Current State Report analysis of progress taken on actions in the 2010 Sustainable Path Community Sustainability
 Plan
- "That Council refer development of a fact-based measurable Climate Action Plan for addressing the climate emergency including consultation with stakeholders to the Sustainability Advisory Committee for inclusion in the Integrated Community Sustainability Plan"
 - Actions to address climate change, possibly including future local plans to explore the climate change emergency in more detail, will be considered as part of the ICSP development process and through related public engagement efforts.
 - Grey County's Climate Change Action Plan (currently in draft form) also identifies a number of community-wide (i.e. County-wide) strategies that the Town may join to take advantage of greater economies of scale and in collaboration with other municipalities throughout the County.

D. Analysis

Climate change mitigation is a key concern for community members. The Blue Mountains Future Story, which is the Town's initiative to develop an Integrated Community Sustainability Plan, ran a public survey from June 10th to July 31st, 2021. This survey asked community members a number of questions regarding their vision for the sustainable future of the Town of

The Blue Mountains, receiving 124 responses. The survey did not specifically ask participants to comment on actions that should be taken to address climate change, focusing instead on five sustainability pillars or themes: Natural Environment, Community Wellbeing (Social Sustainability), Economy, Arts & Culture, and Built Environment. The survey also made reference to the 17 UN Sustainable Development Goals, one of which is to take action on climate change.

Responses to this public survey show a strong level of support for local actions to reduce GHG emissions and address climate change, though respondents were more likely to suggest specific ideas or actions that could make this possible and were less likely to specifically mention 'climate change'. Approximately 87% of survey respondents included at least one priority to take action on climate change, either with a specific mention of climate change, carbon, or similar term, or by including climate-adjacent priorities with motivations in GHG reduction or carbon sequestration, such as: increasing electric vehicle uptake/infrastructure; improving public transit; protecting or expanding tree cover and natural areas; exploring renewable energy options; improving energy efficiency; and, more.

In the Future Story project's Phase 2 What We Heard Report, "Climate action/reduce carbon emissions" was the tenth-most mentioned priority among survey respondents considering their broad sustainability priorities for the next 10-20 years. The second-most mentioned priority overall was "Affordable green energy" which was the top priority under the Economy-themed question with 57 respondent mentions, also receiving 32 mentions under the Natural Environment question. Other themes such as "Responsible consumption and production", "Plant and protect trees", "Walkable trails and active transportation", and more priorities with strong connections to climate change received widespread support among survey respondents. Workshop participants in the Future Story project have also brought up climate change as a key priority in group discussions, more often in the form of climate-adjacent ideas such as cycling networks, green infrastructure and development, responsible tourism, carbon credits, tree protection, and more. Community input to the Future Story project has shown local support to address the climate change emergency with local actions as part of the Integrated Community Sustainability Plan. The What We Heard Report was made available to Council in Staff Report CSOPS.21.087 Community Sustainability Plan Phase 2 Vision, alongside the draft Vision and Goals and a description of community engagement efforts so far.

In 2007, the Town established both corporate and community-wide GHG inventories using 2005 as a baseline year. **Table 1** shows how these targets compare to national, provincial, and the more recently-established Grey County targets. It should be noted that Grey County is currently exploring the possibility of more ambitious GHG reduction targets than those included in the current draft Climate Change Action Plan.

Table 1: Comparison of Select Corporate and Community GHG Reduction Targets

Jurisdiction	Policy	Baseline Year	Short and Medium Targets	Long-Term Target
Canada (National)	Paris Agreement (2015) and Canadian Net-Zero Emissions Accountability Act (2021) ⁷	2005	40-45% reduction by 2030; additional targets to be set for 2035, 2040, 2045	Net zero by 2050
Ontario (Provincial)	Made-in-Ontario Environment Plan (2018) ⁸	2005	30% reduction by 2030	N/A
Grey County (Corporate)	DRAFT Climate Change Action Plan (2021) ⁹	2018	20% reduction by 2030	60% by 2050
Grey County (Community-wide)	DRAFT Climate Change Action Plan (2021)	2018	15% reduction by 2030	50% by 2050
Town of The Blue Mountains (Corporate)	ECDM Plan (2019)	2005	40% reduction by 2030	Net zero by 2050
Town of The Blue Mountains (Community- Wide)	The Sustainable Path (2010)	2005	6% reduction by 2016; 30% reduction by 2025	80% reduction by 2050

The Town's community-scope GHG emissions have not been re-inventoried since the 2005 baseline, meaning we are unable to provide an update on present community emission levels. Estimating community GHG emissions will be an important part of monitoring progress and future success towards achieving the goals of the Integrated Community Sustainability Plan (ICSP). Grey County has conducted a county-wide inventory and is willing to provide a one-time update to the Town of The Blue Mountains' local inventory at no cost, and the ICSP will likely

⁷ Government of Canada. Canadian Net Zero Emissions Accountability Act, 30 Jun. 2021, https://www.canada.ca/en/environment-climate-change/news/2021/06/government-of-canada-legislates-climate-accountability-with-first-net-zero-emissions-law.html

⁸ Province of Ontario Staff. A Made-In-Ontario Environment Plan, Ministry of the Environment, Conservation and Parks, 2018, https://prod-environmental-registry.s3.amazonaws.com/2018-11/EnvironmentPlan.pdf

⁹ ICLEI Canada. DRAFT: Grey County Climate Change Action Plan, 14 May 2021, https://www.grey.ca/programs-initiatives/climate-change-action-plan

identify an action to continue inventorying community-level GHG emissions as part of monitoring progress on implementation of the ICSP over time.

Grey County's May 21, 2021, DRAFT Climate Change Action Plan (CCAP) includes 25 community-scope strategies and 14 corporate strategies to reduce GHG emissions. The success of many of the community-scope strategies will depend on the involvement of the County's lower-tier municipalities, including The Town of The Blue Mountains, with opportunities to join in on County-wide initiatives and collaborate regionally. Several examples include:

- Strategy #1: Residential Energy Efficiency Retrofit Program
- Strategy #2: Commercial/Institutional Building Energy Efficiency Retrofit Program
- Strategy #3: Green Standard for New Buildings
- Strategy #6: Electric Vehicle Adoption
- Strategy #9: Collaborate with Member Municipalities to Support Waste Diversion
- Strategy #10: Re-Use It Centre & Re-Build It Centre
- Strategy #17: Reforestation/Afforestation, Habitat and Biodiversity Protection
- Strategy #21: Climate Adaptation Plan

While the above strategies may provide opportunities for the Town to address corporate GHG emissions, climate-related risks, and support county-wide GHG emissions, actions to reduce community-wide GHG emissions and foster community-wide climate resilience in the Town of The Blue Mountains will largely follow the completion of the Town's ICSP along with continued collaboration with local and regional partners. The ICSP is scheduled for completion in mid-2022, but the Town may wish to proceed with addressing corporate GHG emissions in the meantime. Beginning to develop corporate policies now will begin the Town's response to the Climate Emergency in ways that may go beyond the ICSP, while also helping to prepare staff for future community-focused actions in the ICSP with anticipated alignment or overlap.

The Town first began tracking its corporate GHG emissions in 2005. These emissions come from the Town's provision of key services to the community and include: buildings and facilities; fleet vehicles; water, wastewater and solid waste facilities; and, streetlights and traffic signals. In 2005, the Town's corporate GHG emissions were approximately 1,593 tonnes of carbon dioxide equivalent (tCO₂e). In 2017, the Town's corporate GHG emissions amounted to 1,012 tCO₂e as calculated by Stantec in the production of the Town's Energy Conservation and Demand Management Plan in 2019. This 36.5% decrease in emissions happened despite a 3.4% increase in population, largely due to the phasing out of coal power generation and 'greening' of the provincial electrical grid, alongside the Town's efforts to take actions that improve energy efficiency and reduce energy demand such as through: lighting retrofits and occupancy sensors; heating, ventilation and air conditioning (HVAC) upgrades; water efficiency initiatives (which can reduce the need to heat water); and more.

Table 2, below, displays the Town's corporate GHG emissions in tonnes of CO2e for 2005 and 2018, and includes the percentage share of emissions by category for 2018 – the latest year for which utilities data was available when developing the 2019 ECDM Strategy. Greenhouse gases such as methane and nitrous oxide (commonly released from fuel combustion and landfill

decomposition) have a more significant effect on global warming compared to carbon dioxide (CO2), so the emissions presented in CO2e consider the relative global warming potential of different GHGs and provide their approximate equivalent in terms of carbon dioxide, which has a global warming potential of '1'.

Town Emissions Category	2005 (tonnes CO2e)	2018 (tonnes CO2e)	2018 (%)
Buildings	479	289	29.2%
Streetlights & Traffic Signals	182	5	0.5%
Fleet	336	554	55.9%
Water & Wastewater	F06	136	13.8%
Waste	596	27	0.6%
Total	1.593	1.012	100.0%

Table 2: Town GHG Emissions, 2005 and 2018

While the Town's ECDM Plan includes corporate GHG reduction targets to reduce GHG emissions by 40% below 2005 levels by 2025, and to achieve carbon neutrality by 2050, these targets have not been reported to the PCP program. This staff report seeks Council's direction to proceed with submitting these targets to PCP to complete Milestone 2 and to continue working towards the remaining three Milestones in the PCP milestone framework for corporate GHG emissions, while also preparing regular (likely annual) inventories of the Town's corporate GHG emissions as a key part of participating in the PCP program.

Staff have also identified four opportunities to begin working on corporate policies that will help the Town work towards its GHG reduction targets. These items are outlined in **Table 3**, below. It is important to note that each of these items will require further collaboration with appropriate Town staff, likely in policy-specific working groups, to prepare policy proposals for future consideration and possible endorsement by the Sustainability Advisory Committee and by Council.

Table 3: Proposed Policy Directions for Corporate GHG Reductions and Sustainability

Policy to Reduce Corporate GHG Emissions	Description
Develop a Net Zero Carbon Municipal Building Policy	Municipal buildings and facilities represented 29.2% of the Town's GHG emissions in 2018, making this the second greatest opportunity to reduce corporate emissions. Natural gas prices are also expected to increase as the costs of the federal carbon tax will be passed on to consumers. By 2030, the carbon tax will

represent almost 60% of municipal natural gas costs ¹⁰. Retrofits and upgrades of existing Town facilities continue to save energy; for example, projects completed as part of the previous 2014 ECDM Strategy included lighting retrofits at several facilities and sites, conversion of street lighting to LED lights and fixtures, HVAC upgrades for the L.E. Shore Memorial Library and Thornbury Water Treatment Plant, and many more. Estimates for GHG reductions due to specific projects are not available, but the GHG emissions associated with buildings have decreased gradually between 2014 and 2018 – from approximately 387 tonnes to 289 tonnes, respectively. Working towards Net Zero Carbon design and performance for new and existing buildings will further help the Town meet its reduction goals and mitigate the risk of changing fuel prices.

Net Zero Carbon buildings are designed and operated to minimize GHG emissions through design, construction and materials, and operation of the building, and to offset those emissions with renewable energy generation or high-quality offsets¹¹. Net Zero Ready buildings are built as efficiently as possible and are 'ready' to include renewable energy in the future to fully offset or eliminate the building's GHG emissions. The Net Zero Ready approach ensures buildings are as efficient as possible while allowing for the smaller amount of remaining GHGs to be addressed with renewable energy when it is more cost effective.

A draft Net Zero Building Policy, modeled after a City of Toronto policy for municipal buildings, has been prepared by staff for discussion and further development with Town staff – see **Attachment 1**.

Identifying a schedule of opportunities to retrofit the Town's existing buildings on a path towards Net Zero Carbon performance will require further collaboration among Town staff, including the Manager of Facilities and Fleet, and may benefit from funding support through the Green Municipal Fund (GMF).

Association of Municipalities of Ontario Local Authority Services. Federal Carbon Tax Update
 March 2021, 2 Mar. 2021, https://www.las.on.ca/learning/blog/federal-carbon-tax-update-

[—] March 2021, 2 Mar. 2021, https://www.las.on.ca/learning/blog/federal-carbon-tax-update-march-2021

¹¹ Canada Green Building Council. CaGBC® Zero Carbon Building Standard: Frequently Asked Questions, n.d.,

The GMF Community Buildings Retrofit initiative ¹² provides funding to municipalities to reduce GHG emissions and extend the life cycles of community buildings (such as community centres, libraries, arenas, and other community-oriented facilities). This funding is currently available for monitoring and analysis, recommissioning, capital funding, and even for studies to incorporate ambitious GHG reductions into long-term facilities management plans.

Funding for capital costs to design and build new energy efficient, low emission and resilient community buildings, or to retrofit existing community buildings, is also available through Infrastructure Canada's Green and Inclusive Community Buildings program¹³. This funding opportunity emphasizes Net Zero Carbon and Net Zero Carbon Ready construction, as well as designs that are more resilient to climate change impacts, and which exceed the highest standards for accessibility. Projects that qualify for this funding, which can cover 50-80% of total costs on projects up to a maximum of \$25 million, must be completed before March 31, 2026.

Create a policy that requires waste management plans for municipal facilities and municipal building deconstruction

While waste operations represent less than 1% of the Town's GHG emissions, construction and development materials that end up in the landfill often could have been diverted to avoid some of the embodied carbon associated with the manufacture and shipment of virgin materials for new development projects. Deconstruction, rather than demolition, reduces construction and demolition (C&D) wastes with benefits to local air quality, saving space in the existing landfill, and reducing GHG emissions from the extraction and processing of raw materials to create new building components. In Vancouver and Victoria, British Columbia, estimates of the proportion of C&D wastes that can be diverted is as high as 95%^{14,15}. In a typical home deconstruction, up to 25% of materials can be reused and up to 70% of materials

¹² Federation of Canadian Municipalities. Community Buildings Retrofit initiative, n.d., https://fcm.ca/en/programs/green-municipal-fund/community-buildings-retrofit-initiative

¹³ Infrastructure Canada. Green and Inclusive Community Buildings, 3 Nov. 2021, https://www.infrastructure.gc.ca/gicb-bcvi/index-eng.html

¹⁴ Elliot, Kinsey, et al. The Business Case for Deconstruction, Vancouver Economic Commission, 14 Jul. 2020, https://www.vancouvereconomic.com/blog/news/from-waste-to-wealth-vancouvers-deconstruction-economy-potential/

¹⁵ Thomson, Jimmy. Unbuilding the future: how a young industry is turning yesterday's materials into tomorrow's buildings, 27 Feb. 2021, https://www.capitaldaily.ca/news/deconstruction-victoria-unbuilders

	can be recycled ¹⁶ . Opportunities will vary from building to building, so assessments to determine the potential deconstruction benefits are often necessary. A policy will be developed to prioritize building deconstruction and minimize demolition activities when developing or decommissioning future Town-owned buildings. Town staff will also coordinate waste audits and diversion plans for individual facilities in coordination with the provincial blue box transition.
Long-term plan to transition Town fleet vehicles to electric vehicles and plan for charging infrastructure at Town facilities	The Town's fleet vehicles were responsible for 55.9% of the Town's GHG emissions in 2018 and comprise the only category where emissions have increased since the 2005 baseline, making this the most significant opportunity to reduce corporate emissions. The plan to lease Town fleet vehicles with Enterprise already includes a transition to more fuel-efficient vehicles including built-in anti-idling technology. Town staff will consider a long-term plan to transition towards electric fleet vehicles while preparing to install the necessary electric vehicle charging infrastructure at Town facilities. The contracted provider of the Town's leased fleet vehicles will be engaged, in consultation with necessary Town staff, to help identify opportunities to replace gas- or diesel-powered fleet vehicles with electric alternatives where and when possible. Examples of transition plans or fleet review processes will be sought from other municipalities as part of this initiative.
Develop a tree and naturalization policy for municipal lands and investigate methods of assessing carbon sequestration	Natural areas include forests, watercourses and wetlands, and other ecosystems. These larger, uninterrupted natural areas have more value over smaller pockets in urban areas for species biodiversity, but networks of smaller habitats also have high local value and can be provided by urban tree canopies, gardens, parks and trails, as well as rural woodlots, windbreaks and other lands. The Town has a role to play in enhancing all types of natural areas, and efforts to grow the size and number of natural areas can bring local benefits including improved habitats and species diversity (such as for pollinators and birds), cooler summer

¹⁶ Delta Institute staff. Deconstruction & Building Material Reuse: A Tool for Local Governments & Economic Development Practitioners, May 2018, https://delta-institute.org/wp-content/uploads/2018/05/Deconstruction-Go-Guide-6-13-18-.pdf

microclimates and shade, protection for people and properties from high winds, carbon sequestration, and public enjoyment.

At a corporate level, Town staff can create a policy to explore potential opportunities to enhance natural areas and tree cover on Town lands, and to consider how these efforts may contribute to the Town's GHG mitigation efforts and sustainability of the Town more broadly. The aim will be to complement the Town's Natural Heritage Study, the Town's tree protection bylaw, and local efforts such as Tree Trust Town of The Blue Mountains, with demonstrations and pilot plantings on Town lands as part of enhancing tree coverage, health and biodiversity throughout the community.

Estimating the carbon sequestration benefits of trees and natural areas is difficult to reliably assess and there is no international consensus on forest GHG inventory methods. Nevertheless, Town staff will investigate possible methods to estimate the GHG mitigation benefits of demonstration projects, including an understanding of any caveats or limitations to different approaches.

This report outlines some of the changing climate conditions that the Town of The Blue Mountains can expect to experience in the coming years. Adapting to climate change and extreme weather events will be vital for the long-term resilience of the community. With respect to the Town's infrastructure, Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure requires all municipalities to prepare strategic asset management policies that include, among other requirements: actions that may be required to address vulnerabilities relating to climate change, associated costs, adaptation opportunities, mitigation approaches to reduce emissions, disaster planning, and contingency funding. The Town has undertaken vulnerability assessments that incorporate climate change considerations for several capital projects, and will continue to do so as an important input to asset management. Town staff will investigate opportunities to undertake climate change adaptation planning for corporate infrastructure and facilities, which could potentially follow the Building Adaptive and Resilient Communities (BARC) framework provided by Local Governments for Sustainability (ICLEI) Canada. ICLEI BARC is used by communities of all sizes across Canada and can guide both corporate- and community-scope adaptation planning. A community-wide climate change adaptation plan can be pursued in partnership with Grey County and other municipalities within the County as mentioned earlier in this report, and Town staff will consider opportunities to share information or other opportunities to enhance the resilience of community members to extreme weather and climate change on an ongoing basis.

E. Strategic Priorities

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

F. Environmental Impacts

The recommendations of this report aim to further the Town's efforts to reduce environmental impacts, specifically to reduce the Town's greenhouse gas emissions, with the potential for these efforts to enhance biodiversity, reduce waste, and improve local air quality. No adverse impacts to the environment are anticipated due to the recommendations of this report.

G. Financial Impacts

The Town of The Blue Mountains 2022 Budget includes \$75,000 for implementation of actions to be identified in the Integrated Community Sustainability Plan. Town staff will use the existing Sustainability operating budget to develop the proposed programs and policies as outlined below. An individual Town project may have financial implications of these proposed and other new policies. Individual projects will need to budget and plan projects to adopt the policy objectives.

H. In Consultation With

Sam Dinsmore, Deputy Treasurer/Manager of Accounting and Budgets

Ryan Gibbons, Director of Community Services

Phil Pesek, Manager of Facilities and Fleet

Linda Swanston, Manager of Climate Change Initiatives, Grey County

I. Public Engagement

The topic of this Staff Report has not been the subject of a specific Public Meeting and/or a Public Information Centre. However, closely related topics around climate change and local action that community members would like the Town and other stakeholders to take, have been included in Public Surveys and Public Meetings through the development of an Integrated Community Sustainability Plan (ICSP). While these public engagement opportunities did not include the specific recommendations of this staff report, community respondents and

participants in The Blue Mountains Future Story have shown support for the Town to reduce local GHG emissions. Public engagement on actions that should be taken to address climate change will continue through the upcoming Phase 3 of developing the ICSP, and will then continue through the implementation phase with regards to specific projects or policy development as necessary.

Any comments regarding this report should be submitted to Jeffery Fletcher, Manager of Sustainability and Solid Waste managersolidwaste@thebluemountains.ca

J. Attached

1. Sample Draft Net Zero Municipal Building Policy

Respectfully submitted,

Jeffery Fletcher, Manager of Sustainability & Solid Waste

Shawn Carey
Director Operations

For more information, please contact:

Jeffery Fletcher, Manager of Sustainability & Solid Waste managersolidwaste@thebluemountains.ca
519-599-3131 extension 238