



West Lincoln
Your Future Naturally

Township of West Lincoln's Plan to Mitigate Environmental Impacts 2020-2025

**Township of West Lincoln
Niagara Region**

November 2020

Schedule 'A'

Prepared by the Climate Change and Sustainability Coordinator

PLAN TO MITIGATE ENVIRONMENTAL IMPACTS

The Corporation of the Township of West Lincoln (Corporation) recognizes the global and local impacts of climate change and understands its responsibility to help reduce Greenhouse Gas (GHG) emissions while also preparing its community to adapt to the changing climate. This Plan to Mitigate Environmental Impacts (Plan) is the Corporation's first of many efforts to become resilient to climate change, while also a way for the Corporation to lead by example. Included in this Plan are sections dedicated to both the community and corporate. Both individual sections identify where we are now and where we want to go. This Plan concludes by identifying how we are going to get to where we want to go. This Plan builds off of regional, provincial, and national Climate Change Action Plans, but provides details specific to West Lincoln.

The Corporation's Green Team led this Plan to completion by providing their valuable insights. The Green Team serves as an agency (1) to provide an opportunity for the flow of strategic advice and expertise between staff and Council for the continued implementation of the Plan to Mitigate Environmental Impacts and (2) to facilitate staff discussion on how particular environmental, economic, and social issues impact municipal operations as well as the broader community.



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The preparation of this Plan was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them. This Plan was prepared by Meghan Birbeck the Climate Change and Sustainability Coordinator for the Corporation of the Township of West Lincoln.



ACKNOWLEDGEMENTS

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Pauline Pace, Public Works Secretary and Jean Fiesen, Accounting Clerk and General Secretary were both integral colleagues, as their knowledge of the Corporation's internal energy tracking and external energy stakeholders was vital to generate the GHG emissions inventory for this report.

Additionally, the work done by Katelyn Hill, Deputy Treasurer and Donna DeFilippis, Treasurer/ Director of Finance was instrumental in insuring the Corporation received the grant instalments for this Plan from FCM.

OTHER CONTRIBUTORS

This Plan would not have been possible without the support from staff members, Senior Management Team, and Council members from Township of West Lincoln.

The author would like to thank the following for providing their time, information, comments, and edits:

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Asset Management : Raising the Elevation of a Bridge

Captured by: Meghan Birbeck

Captured on: June 24, 2019

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ABBREVIATIONS

Corporation	Corporation of the Township of West Lincoln
COVID-19	Coronavirus, 2019
EOI	Ease of implementation
FCM	Federation of Canadian municipalities
GHG	Greenhouse gas
PCP	Partners for Climate Protection
Plan	Plan to Mitigate Environmental Impacts
tCO ₂ e	Tonnes of CO ₂ equivalent



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Agriculture: Wheat
Captured by: Meghan Birbeck
Captured on: June 24, 2019

INTRODUCTION

This Plan is a five-year plan that will help the Township of West Lincoln (Township) combat environmental impacts, predominantly climate change over the long term. While this plan focuses on mitigating climate change it also considers adaptation when possible. Climate change impacts the quality of life for citizens across the planet. Specifically, the adverse impacts of climate change will affect the economic, social, and environmental well-being of our children and grandchildren's lives.

At times the term climate is misinterpreted with the term weather. A way to remember the difference between the two terms is that climate is what you expect and the weather is what you get. The weather then identifies what happens at a particular point in time while the climate identifies the average of weather over time and space. The current indisputable observations by scientists are that the climate is changing. The current changes to the climate are resulting in rising temperatures, crop yield unpredictability, health impacts to both humans and animals, and an increased number of extreme weather events and natural disasters such as floods and droughts. Throughout the Region of Niagara, climate change projections indicate a warmer, wetter future with more extreme weather events. The climate changes we are seeing now are based on the release of greenhouse gas (GHG) emissions from the 1900s. Since GHG emissions impact on a cumulative rate [1], the consequences of today's GHG emissions will not be seen for at least 25-50 years.

The former Environmental Commissioner of Ontario, Dianne Saxe, identified that as compared to the majority of the world's countries and population, Canadians and Ontarians have some of the world's highest per capita emissions, higher than most other developed countries, even other northern countries with cold climates [2]. To contribute to the GHG emissions target of 80% less by 2050 as set by the Federal government [3], Ontario's emissions in 2050 will have to be less than two (2) tonnes of CO2 equivalent (tCO2e) per person [2]. This will require a significant transformation in the way we live and how we use energy.

Roughly half of Canada's GHG emissions are under the direct or indirect influence of municipal governments [4]. By reducing GHG emissions from municipal operations and in the community, West Lincoln will receive multiple co-benefits, including cost savings, cleaner air, healthier citizens, and more resilient infrastructure. Climate change affects us all and to ensure a sustainable future for the next generations, support and understanding are needed by the Council, municipal staff, and the residents of West Lincoln.

[1] GHG emissions can be trapped in the atmosphere for several generations

[2] Saxe, D. (2016). *Facing climate change*. Greenhouse Gas Progress Report.

[3] Government of Canada. (2017). *Government of Canada set ambitious GHG reduction targets for federal operations*. Treasury board of Canada secretariat.

[4] EnviroEconomics. (2009). *Act locally: The municipal role in fighting climate change*. Federation of Canadian Municipalities.

BACKGROUND

In February 2019, the Corporation was awarded a staff support grant from the Federation of Canadian Municipalities (FCM). This grant is intended to supplement 80% of the salary of an employee through FCM's Municipalities for Climate Innovation Program. As a result of receiving the award, the Corporation hired a Climate Change and Sustainability Coordinator to work on initiatives to reduce the Township's emission of GHGs. Part of the Corporation's requirement has been to develop a comprehensive five-year corporate Energy Conservation and Demand Management Plan and to construct this Plan. Prior to the FCM grant, the Corporation had indirectly been addressing climate change with many of their supporting municipal documents acknowledging the need to be stewards to the natural environment to create a healthy community for its residents. Such municipal documents that suggest this sentiment include the Corporation's 2018 Official Plan, 2016 Asset Management Plan, and 2019 Strategic Plan.

Council has supported energy-saving initiatives that have reduced West Lincoln's energy consumption, energy costs, and GHG emissions. For example, in the past, they have supported staff in converting municipal streetlights to LED bulbs, which would assist in reducing GHG emissions across the community. Additionally, the Council supported the Township's new Community Centre to be built in a way that met LEED Silver certification requirements. This ongoing commitment, coupled with this Plan, provides optimism that the reduction strategies within this plan will be integrated into the broader Corporation and lead to GHG reduction targets being met.

APPROACH

In July 2019, Council further demonstrated West Lincoln’s commitment to taking action on climate change and approved a resolution put forth by the Climate Change and Sustainability Coordinator to join the Partners for Climate Protection (PCP) program. The PCP program is a collaborative effort of FCM and Local Governments for Sustainability Canada, and consists of a national network of over 350 municipal governments working to address climate change by reducing GHG emissions [5]. The PCP program administers a 5-step Milestone Framework (Table 1) to take action on climate change by reducing emissions in a municipal corporation and its associated community. By joining the PCP program the Corporation gained access to the PCPTool, which allowed the Climate Change and Sustainability Coordinator access to a web-based resource that helps quantify, monitor, and manage GHG emissions. The PCPTool along with the PCP’s document on Canadian Supplement to the International Emissions Analysis Protocol [6] were used in this Plan to create a GHG emission inventory. In October 2019, the Township successfully achieved Milestone 1 of the program and through Council’s endorsement of this Plan, has achieved Milestones 2 and 3.

Table 1: The PCP Program Framework

Milestone	Status
Milestone 1.0 – Creating a GHG emissions inventory and forecast	Achieved October – 2020
Milestone 2.0 – Setting an emissions reduction target	In-progress
Milestone 3.0 – Develop a local action plan	In-progress
Milestone 4.0 – Implementing a local action plan or set of activities	On-going
Milestone 5.0 – Progress and reporting results	2021 & on-going

[5] Federation of Canadian Municipalities. (n.d.). *Partners for climate protection*. Retrieved August, 4, 2020, from <https://fcm.ca/en/programs/partners-climate-protection>.

[6] Partners for Climate Protection. (n.d.). *Partners for climate protection protocol: Canadian supplement to the international emissions analysis protocol*. Retrieved August, 4, 2020, from <https://fcm.ca/sites/default/files/documents/resources/report/protocol-canadian-supplement-pcp.pdf>

PLANNING FOR CLIMATE CHANGE AND COVID-19

While the Green Team and Climate Change and Sustainability Coordinator were putting this Plan together, the Township experienced first-hand challenges that come from the coronavirus, 2019 (COVID-19) pandemic. The World Health Organization identifies that 10-15% of those who contract COVID-19 may experience severe symptoms, while 5% may become critically ill [7]. Due to these statistics, COVID-19 is an immediate threat. Citizens are learning to bend habits and routines so that our society does not break. Table 2 below displays the local and global health impacts of COVID-19.

Governments initially influenced citizens to bend habits and routines by enforcing social distancing measures. These measures add in mitigating the spread of COVID-19 to the vulnerable population who would be critically compromised by the disease. While these measures were seen as a necessary step to ensure the health of citizens, they spawned a significant problem for the economy by causing disruptions to Canadian businesses [8].

Table 2: Overview of COVID-19's Impact on the Health of citizens

Location*	Total Cases	Deaths	
		Count	Rate
Region of Niagara	1,294	68	5.3 %
Ontario	73,143	3,141	4.3 %
Canada	220,213	9,973	4.5 %
Worldwide	43,444,797	1,158,882	2.7 %

* Data for all locations was retrieved from Google News on October 27, 2020

Professor Cameron Hepburn encourages governments to consider promoting a green economic recovery when stimulating the economy in light of COVID [9]. A green economic recovery method adds a humble consideration to the notable Keynesian stimulus approach, which is to consider the environment. Hepburn simplifies the additional consideration by expressing:

Keynesian stimulus: Dig hole, fill it in
Green Stimulus: Dig hole, plant tree, fill it in

[7] World Health Organization. (2020). *What we know about long-term effects of COVID-19*. Retrieved September, 12, 2020, from https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update-36-long-term-symptoms.pdf?sfvrsn=5d3789a6_2#:~:text=%E2%80%A2%20Most%20people%20with%20COVID,have%20lasting%20health%20effects.

[8] Gu, M. (2020). *Economic Impact of the COVID-19 Pandemic on Canadian Businesses across Firm Size Classes*. Statistics Canada. Retrieved September, 12, 2020, from <https://www150.statcan.gc.ca/n1/pub/11-626-x/11-626-x2020017-eng.htm>.

[9] Hepburn, C. (2020). *The economics of a green recovery* [PowerPoint slides]. Ethelo eDemocracy.

For Earth Day 2020, Ipsos - a global market research specialist, put out a report discussing how the world views climate change amid the global pandemic [10]. The report identifies that the majority of citizens globally view climate change as severe of a crisis as COVID-19 and therefore support a green recovery. This sentiment is echoed nationally: 64% of citizens agree that in the long term, climate change is as serious a crisis as COVID-19 and 61% agree that governments should prioritize climate change in the economic recovery after COVID-19. From this standpoint, COVID-19 is our Sprint and Climate Change in our Marathon. The Clean Air Partnership builds on this by stating that how well we enable our response to this COVID-19 sprint to be aligned with our climate, low carbon economy, and equity goals will impact how well prepared we are to run our climate marathon [11].

To close, the Clean Air Partnership detect that there are already several notable outcomes from our collective response to COVID-19 that will help prepare use to combat climate change. Some takeaways include:

- there is an opportunity and a need to build back better after the crisis;
- there is a need to recognize the preventative role of government in tackling systemic risks;
- there is a need to use science and results to understand our threats, and to know how to act;
- there is a need for individuals and businesses to take action;
- there is a need for governments to put collective structures in place that allow, enable, and ensure the actions undertaken by individuals and businesses put what science says works into action;
- societies can make massive changes in the way they function when the community is aligned; and
- very low interest rates make this a great time to make such investments.

[10] Gray, E. & Jackson, C. (2020). *Earth day 2020: How does the world view climate change and Covid-19?* Ipsos global advisor.

[11] Kalapos, G. (2020). *Planning for COVID and Climate* [PowerPoint slides]. Clean air partnership.



Active Transportation: School Yard Bike Rack

Captured by: Meghan Birbeck

Captured on: September 18, 2019

METHODOLOGY

To prepare the action items provided in this Plan the Township's Climate Change and Sustainability Coordinator analysed key external documentation identifying the use of assets and services that emit GHGs. In addition, the coordinator chaired the Green Teams meetings and published several Township and Community surveys. Through the utilization of the identified methods, it is hoped that a 'Made-in-West Lincoln' approach was achieved and represented in the action items of this Plan. Action items are intended to be practical and applicable to the Township when implemented on a departmental level.

DOCUMENT REVIEW

The following documentation was reviewed with respect to the preparation of this Plan.

- Township of West Lincoln's Energy Conservation and Demand Management Plan, 2019.
- City of Port Colborne Greenhouse Gas Emissions Reduction Plan, 2020
- Township of Tay's Climate Change Action Plan, 2019
- Township of Cavan Monaghan Climate Change Action Plan, 2016
- City of Kinston Climate Change Action Plan, 2014

DESCRIPTION OF REPORTING INCLUSIONS

COMMUNITY

The PCP protocol identifies the following as key reporting sectors and subsectors that this plan considered when determining the community's GHG emissions:

- Stationary energy
 - Residential, Commercial, and Industrial buildings
 - Includes GHG emissions generated from electricity and natural gas with data obtained from Niagara Peninsula Energy Inc. and Enbridge respectfully. Both energy providers offered data by postcode groupings. It is important to note that a single postal code boundary can lie among several municipalities and therefore strategic postal codes were considered in this plan. These postal codes include:
- Transportation sector
 - On-road transportation
 - Includes GHG emissions generated from commuter travel. A lack of Fuel Sale and Vehicle Kilometres Travelled data required the commuter travel data from Stats Canada be extracted for this report.
- Waste sector
 - Solid waste
 - Includes GHG emissions generated from the weight of curbside collection and obtained from the Niagara Region. The Region offered data on a landfill basis. Two other municipalities have curbside waste dropped of at the same landfill as West Lincoln residents and therefore waste was divided up on a per capita basis to determine the Townships estimated contribution.

CORPORATION

The PCP protocol identifies the following as key reporting sectors and subsectors that this plan consider when determining the corporation's GHG emissions:

- Buildings and facilities
 - Includes GHG emissions generated from electricity and natural gas used at Township owned and leased facilities where the Township pays utility costs. Data has been obtained from utility bills from Niagara Peninsula Energy Inc. and Enbridge respectfully. It is important to note that when energy providers have an error in data collection it is not always optimally displayed on the utility bill they provide the Township.
- Fleet vehicles
 - Includes GHG emissions from all vehicles and machinery owned and leased by the Township. Data has been obtained for the Townships own internal fuel tracking records. However, the Townships records do not track the efficiency of fuel usage by vehicles.
- Street lights
 - Includes GHG emissions from electricity used to power streetlights, traffic lights and signals, and miscellaneous outdoor lighting throughout the Township. Data has been obtained from utility bills from Niagara Peninsula Energy Inc.
- Water and Wastewater infrastructure
 - Emissions from water and water treatment are not included in the Township of West Lincoln's inventory given that responsibility for these operations resides with the Niagara Region. Based on the structure of water and wastewater treatment, this sector does not meet the protocol's definition of "operational control" for a municipality, and is therefore excluded from the GHG inventory. The Niagara Region has reported energy and emissions data for water and wastewater facilities in the annual Greenhouse Gas Report, as well as the 2019 - 2023 Energy Conservation and Demand Management Plan. This data can be found on the Niagara Region website.
- Solid waste
 - Includes emissions from solid waste collected from Township facilities, which are landfilled. The Niagara Region who in charge of solid waste for the area did not have data specific to the Township's Corporate facilities, therefore the Climate Change and Sustainability Coordinator did a waste audit for key waste receptacles throughout the Corporation.



Solid Waste: Used Tim Hortons Coffee Cup
Captured by: Meghan Birbeck
Captured on: November 12, 2019

TOWNSHIP GHG EMISSIONS

West Lincoln emits approximately 102,978 tCO₂e, with corporate emissions accounting for less than 1% (874 tCO₂e) of West Lincoln’s total GHG emissions, while the community is responsible for emitting 99% of the Township’s GHG emissions (102,974 tCO₂e) (Figure 1).

Measuring GHG emissions on a per capita basis allows us to examine and benchmark the emissions of the municipality relative to its population. With a recorded population of 14,500 [12] the Township emitted approximately 7.01 tCO₂e in 2019, as shown in Table 3. It is important to note that it is the absolute amount of GHG emissions that ultimately affects the environment. For example, an area with a high per capita emissions rate but a small population could produce fewer emissions than one with a lower per capita emission rate and larger population.

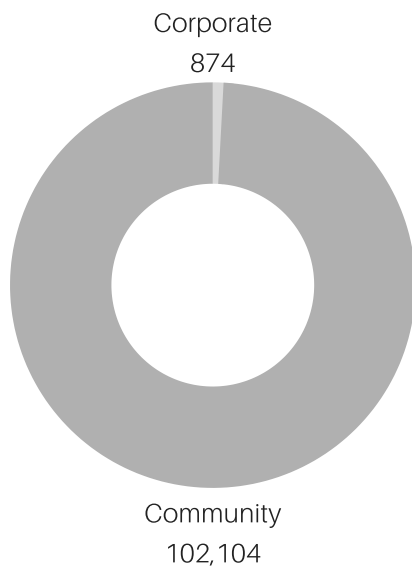


Figure 1: West Lincoln's Total GHG Emissions (tCO₂e), 2019

What is Carbon Dioxide Equivalent CO₂e?

It is a measurement that allows various GHGs to be compared. GHG emissions are converted using their global warming potential to their value as if they were carbon dioxide (Figure 2).

Primary GHG Emissions	Global Warming Potential (GWP)*
Carbon Dioxide (CO ₂)	1
Methane (CH ₄)	28
Nitrous Oxide (NO ₂)	265

* Values retrieved from the IPCC Fifth Assessment Report

Figure 2: Impact of Primary GHG Emissions

Table 3: Per Capita GHG Emissions (tCO₂e), 2019

Municipality	Permanent population (Census 2016, Statistics Canada)	Total GHG emissions, 2019 (corporate + community)	Per capita emissions, including corporate (tCO ₂ e)
West Lincoln	14,500	102,978	7.10

[12] Statistics Canada. (2017). *West Lincoln, Township*. Census Profile, 2016.

COMMUNITY GHG EMISSIONS, 2019

Following the PCP’s protocol, community energy use and emissions are reported by sector (transportation, residential, solid waste, commercial and institutional, and industrial) and collected for a baseline year, in this case for 2019 (Table 4, Figure 3). For additional resources, emissions have also been collected by source (diesel, gasoline, methane, electricity, and natural gas) (Table 5, Figure 4).

As illustrated in Table 3, transportation is the largest emitter of GHGs, accounting for 58% (59,734 tCO₂e) of West Lincoln’s total community emissions. The personal vehicle, in large part, remains the dominant method of choice for travel in our area, which can be attributed to the largely rural setting of the community. The Green Team recommends residents to consider alternatives to the obvious choice, such as telecommuting, carpooling, biking, or walking where possible.

The residential sector was the second largest emitter of community emissions in 2019. GHG emissions from the energy used by the residential sector was approximately 17,729 tCO₂e. Moving forward, Green Team will explore opportunities to work with the community to encourage a reduction in the amount of electricity and natural gas used in our homes through conservation, improved efficiency, and the use of renewable energy sources. The Corporation is encouraged to consider a strong planning policy that supports more sustainable homes, developments, and neighbourhoods that exceeds current Building Code and/or Planning Act requirements.

Table 4: Community Total GHG Emission (tCO₂e) by Sector, 2019

Sector	GHG emissions (tCO ₂ e)	% of total community emissions
Transportation	59,734	58%
Waste	2,948	3%
Residential	17,729	17%
Commercial	10,934	11%
Industrial	10,759	11%
Total	102,104	100%

Table 5: Community Total GHG Emission (tCO₂e) by Source, 2019

Sector	GHG emissions (tCO ₂ e)	% of total community emissions
Diesel	18,816	18%
Gasoline	40,918	40%
Methane	2,948	3%
Electricity	3,447	3%
Natural gas	35,975	36%
Total	102,104	100%

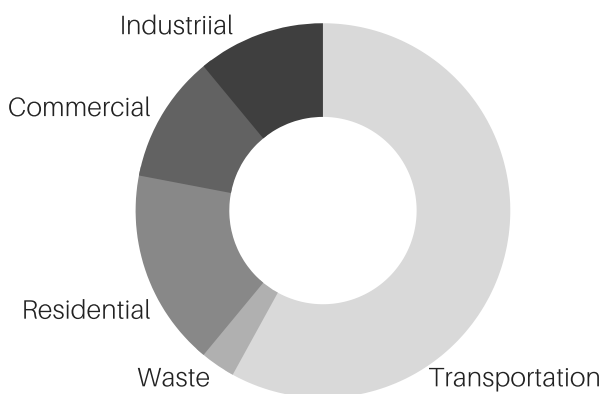


Figure 3: Community GHG Emission by Sector, 2019

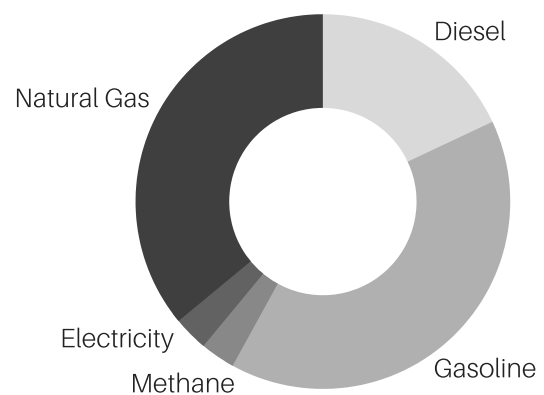


Figure 4: Community GHG Emission by Source, 2019

COMMUNITY GHG EMISSIONS FORECAST, 2019-2031

In 2019, 102,104 tCO₂e were emitted through community day-to-day activities. Based upon the projected increase of the Township's population as forecasted in the Niagara Region's 2016 Municipal Comprehensive Review [13], the Township's community GHG emission forecast is projected per a 2.98% annual population growth rate to 2031. As a result of the projected increase and considering business-as-usual (BAU) operations, GHG emissions are expected to grow to 145,236 tCO₂e (42.2%) by 2031, if no significant action is taken (Figure 5). This increase over 2019 GHG emission levels would allow an additional 43,132 tCO₂e to be emitted by the community by 2031.

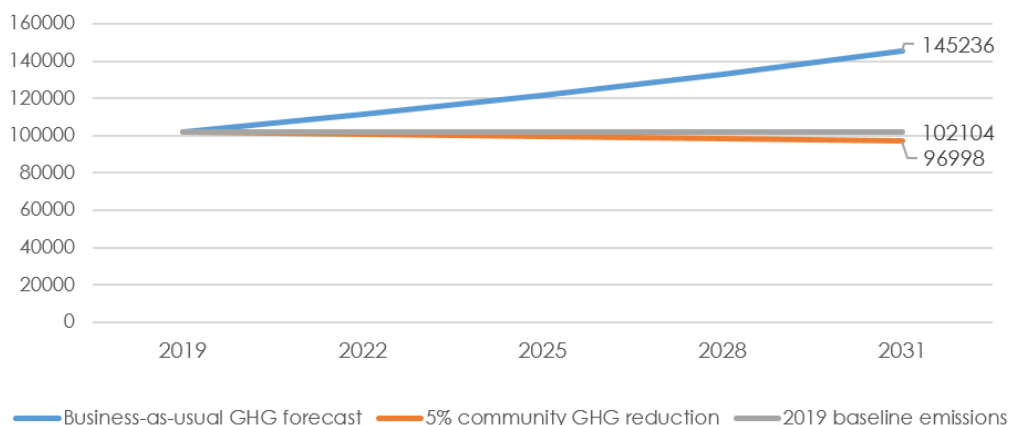


Figure 5: Community GHG Emission Forecast, 2019-2031

COMMUNITY GHG EMISSIONS REDUCTION TARGET, 2031

The community of West Lincoln is aiming to achieve a 5% reduction in its GHG emissions from the 2019 baseline by 2031. This target represents an absolute emission reduction of 5,106 less tCO₂e relative to the 2019 baseline, and a 2031 target of 96,998 tCO₂e.

[13] Niagara Region. (2016). *How we grow*. Municipal Comprehensive Review. Retrieved on August 4, 2020 from <https://www.niagararegion.ca/2041/pdf/mcr-pic3-boards.pdf>

COORPORATE GHG EMISSIONS, 2019

This Plan includes recommendations to reduce energy and emissions from municipal operations including fleet, buildings and facilities, solid waste, and streetlights. The corporate data inventoried focuses exclusively on energy and GHG emissions that are directly controlled by the Township. It does not include emissions that are a consequence of activities from sources not controlled or owned by the Township (including third-party contractors, construction activities, or businesses) or those that occur outside West Lincoln’s geographical boundary.

In 2019, the baseline year, the Corporation's total energy use was approximately 20,505 GJ, which is equivalent to 874 tCO₂e (Table 6). These corporate emissions came from the use and production of diesel, gasoline, methane, electricity and natural gas (Table 7, Figure 7).

As illustrated in Table 6 and Figure 6, the Corporation's GHG emissions predominately stem from facilities (54%) and fleet (44%). Table 7 and Figure 7 further identify that facilities emissions are generated from the heating and powering facilities with natural gas (49%) and electricity (5%), while fleet emissions are generated from diesel (34%) and gasoline (10%) consumption.

Table 6: Corporate Total GHG Emission (tCO₂e) by Sector, 2019

Section	GHG emissions (tCO ₂ e)	% of total community emissions
Fleet	388	44%
Waste	8	1%
Streetlights	8	1%
Facilities	470	54%
Total	874	100%

Table 7: Corporate Total GHG Emission (tCO₂e) by Source, 2019

Sector	GHG emissions (tCO ₂ e)	% of total community emissions
Diesel	298	34%
Gasoline	90	10%
Methane	8	1%
Electricity	53	6%
Natural gas	425	49%
Total	874	100%

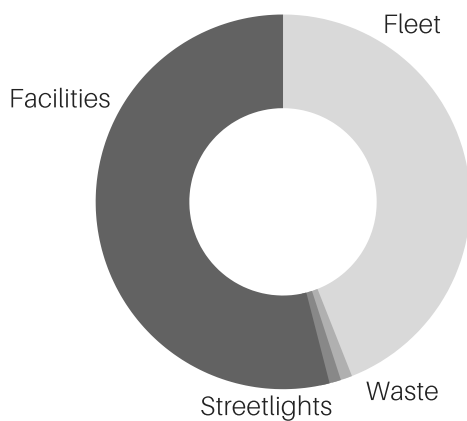


Figure 6: Community GHG Emission by Sector, 2019

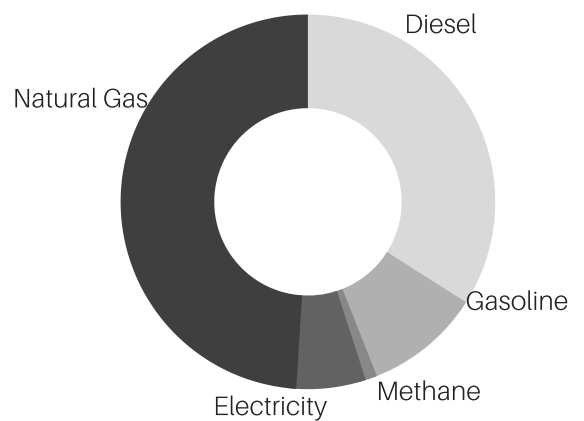


Figure 7: Community GHG Emission by Source, 2019

CORPORATE GHG EMISSIONS FORECAST, 2019-2031

In 2019, the Township's corporate GHG emissions were 874 tCO₂e as a result of day-to-day municipal operations. Based upon the projected increase of the Township's population to approximately 22,630 by 2031 from 2019, as forecasted in the Niagara Region's 2016 Municipal Comprehensive Review [14], the Township's corporate GHG forecast is projected per a 2.98% population increase to 2031. As a result of that increase and considering BAU operations, corporate GHG emissions are expected to grow to 1213 tCO₂e, or by 38.8% by 2031. As GHG emissions are directly correlated to energy costs, the expectation is that municipal expenses would also increase relative to this increase of GHGs.

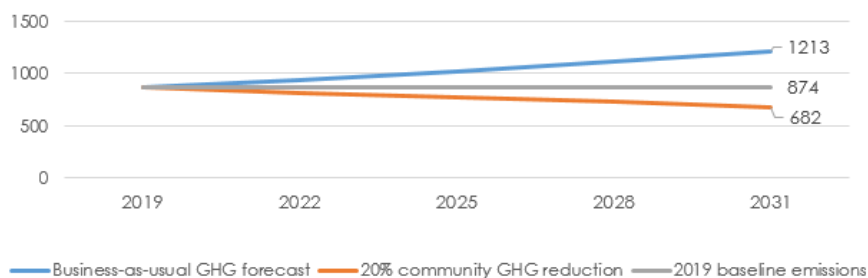


Figure 8: Corporate GHG Emission Forecast, 2019-2031

CORPORATE GHG EMISSIONS REDUCTION TARGET, 2031

The Corporation is aiming to achieve an internal GHG emissions reduction target of 20% below 2019 levels by 2031. This target represents an absolute emissions reduction of 192 tCO₂e relative to baseline year, having the Township strive to emit no more than 682 total tCO₂e from corporate activities in 2031. Under the Paris Agreement, Canada has committed to reducing GHG emissions by 30% below 2005 levels by 2030. The 20% target to be achieved by the Township remains consistent with the selected Federal target.

Based on West Lincoln's utility bills the commodity price for energy consumption (natural gas and electricity) in 2019 was approximately \$256,829 for the Township owned buildings. Achieving a 20% GHG reduction target would result in a projected cost-savings of up-to approximately \$51,365 from the facilities alone over the next ten years, or \$5,136 per year. This is a conservative estimate, which considers average annual costs for buildings and facilities only, with the opportunity for greater cost savings highly likely if the targets are achieved and GHG emissions are reduced across each of the 5 sectors.

Of West Lincoln's eight (8) owned facilities, five have been constantly requiring more energy than the average provincial facility in their operational classification (Table 8). These facilities are the administrative building, public works operations centre, Township arena, Wellandport library, and Fire station #2. However, it is important to note that the Township's arena was demolished in the summer of 2019.

Table 8: Corporate facilities and their estimated energy costs, 2019

Municipal operation	Address	Total square feet (sq.ft)	Energy consumption		GHG emissions (tCO ₂ e)	5 year AVG energy intensity	Provincial AVG energy intensity
			Electricity (kWh)	Natural Gas (m ³)			
Community Centre	177 West St.	95,754	943,101	121,829	259	6.1	7.4
Administration	318 Canborough St.	14,671	169,014	22,464	48	7.4	6.2
Public Works	6218 London Rd.	7,427	86,386	23,724	48	9.6	6.2
Arena	177 West St.	18,816	115,764	21,835	45	11.1	7.8
Fire Station #1	344 Canborough St.	12,424	59,477	18,366	37	5.3	5.4
Wellandport Library	5042 Canborough Rd.	3000	27,245	7,138	14	8.9	6.2
Fire Station #2	8635 RR 65	4,978	46,243	5,600	12	5.9	5.4
Caistorville Library	9549 York Rd.	2,355	19,873	3,403	7	5.6	6.2
Total			1,467,103	224,359	470		
Estimated Total cost(\$)			\$186,519	\$70,310	\$256,829		



Corporate Fleet: Vehicles Parked in front of the Township's Community Centre
Captured by: Meghan Birbeck
Captured on: June 24, 2019

NEXT STEPS

As part of the implementation plan, Green Team staff will review West Lincoln's long-term and annual capital budgets on an on-going basis to identify opportunities to reduce corporate GHG emissions. Moving forward, Green Team will provide recommendations as to what scheduled projects and/or plans have the potential to reduce GHG emissions, how those initiatives may result in additional GHG reductions through enhanced sustainability options, and will work closely with municipal staff to integrate these recommendations into municipal operations, policies and procedures as feasible. With that being said, as changes to policy, legislation, technology, climate and/or other changes occur, the recommended actions will evolve. Some of the recommendations are directly aligned with West Lincoln's Energy Conservation and Demand Management Plan, Asset Management Plan and/or Strategic Plan, and all have positive environmental, social and economic outcomes.

RECOMMENDATIONS

Table 8 and Table 9 lists the objectives and action items that the Green Team have identified to guide the Township in meeting their 20% corporate and 5% community GHG reduction targets.

MONITORING AND REPORTING

Monitoring of the Plan and its objectives will be carried out by the Green Team who will be supported by Township Planning staff. The status of emissions data and corresponding objectives will be compiled, analyzed, and reported to council as a supplementary component of the Energy Consumption and Greenhouse Gas Emissions Report. At least once every five (5) years the Plan will be reviewed and objectives will be updated to account for changes in usage, technology and availability of alternative energy sources.

IMPLEMENTATION COSTS

For the purpose of this plan, four expenditure categories were used to estimate the total cost associated with the implementation of each action in Table 9.

- **Capital:** Capital expenditures are typically for projects and programs related to operations, such as installing solar photovoltaics on municipal facilities, or bike lane construction.
- **Salary:** Represents the personnel costs required to implement Plan activities. Salary costs were estimated at staff hours per action.
- **Consultants:** Municipalities often hire external consultants to support the implementation of climate plan actions.
- **Materials:** Some actions may require materials and supplies (i.e. brochures and meeting materials).

The cost is expressed as low (\$ = less than \$1,000), moderate (\$\$ = more than \$1,000 but less than \$5,000), medium (\$\$\$ = more than \$5,000 but less than \$10,000), high (\$\$\$\$ = more than \$10,000 but less than \$20,000), ICA (more than \$20,000). If the cost of any action is estimated as more than \$20,000, this will automatically require the preparation and municipal review of an ICA, either provided by Green Team or by Township staff. As relevant, the expected return on investment (ROI) will also be considered by both Green Team and the municipality prior to implementation.

Table 9: Objectives to reduce GHG emissions

STAFF FOCUSED OBJECTIVES

#	Objectives	#	Action items
1	The Corporation commits to monitoring and staying informed on its energy use and greenhouse gas emissions.	1.1	The Green Team will continue to meet after this Plan is established to monitor and report on the Township's progress.
		1.2	Develop a plan to provide all staff levels with appropriate climate change and sustainability messaging.
2	The Corporation commits to ensuring that all levels of staff have the information necessary to manage their personal energy use and greenhouse gas emissions while at work.	2.1	Conduct a baseline assessment of staff's knowledge of their personal work place contributions to greenhouse gas emissions.
		2.2	Create a file under the shared network where all staff can easily find resources related to climate change and sustainability that are applicable to staff individual workplace roles and to the Corporation as a whole.
		2.3	Develop an ongoing climate change and sustainability training and awareness plan for all levels of staff that may include workshops, lunch and learns, or digital resources.
3	The Corporation commits to ensuring that staff members have the information necessary to manage the Township's energy use and greenhouse gas emissions within their areas of responsibility.	3.1	Include climate change and sustainability rhetoric resembling greenhouse gas inventories, greenhouse gas reduction targets, energy use performance benchmarks, climate change action items, and the Township's commitment to the Partners for Climate Protection program into all applicable municipal plan.
		3.2	Integrate climate change considerations within business decisions by adding it to staff reports, request for proposals, & request for tenders, etc. to ensure decisions are made in consideration of energy efficiency & greenhouse gas reduction targets & the Township's Partners for Climate Protection program commitment.
		3.3	Consider recommendations to update Emergency Management Plans, specifically the Hazard Identification Risk Assessment (HIRA) to include climate change impacts (i.e., extreme weather, wildfire, flooding, etc.) & how residents can be better prepared.
		3.4	Establish a Corporate Climate Change Revolving Fund to finance corporate energy retrofit projects.
4	The Corporation commits to informing citizens about the initiatives.	4.1	Develop a plan to provide citizens with appropriate climate change and sustainability messaging through the avenues of regular newsletters, water bills & tax bills, social media, and/or the Corporation's website.

FACILITY FOCUSED OBJECTIVES

#	Objectives	#	Action items
5	The Corporation commits to lower utility demands for activities and facilities	5.1	Continue to implement the Township's current energy Conservation and Demand Management Plan.
		5.2	Benchmark energy use and targets against provincial standards.
		5.3	Prepare an inventory of municipal buildings & their associated energy audit status (not-completed, completed, implemented, etc.).
		5.4	Implement a facility assessment process to conduct regular energy audits on a rotational basis to identify opportunities for improved efficiency and produce annual energy report card - prioritizing the top GHG emitting facilities.
6	The Corporation commits to establishing policies that are aimed at reducing energy use and greenhouse gas emissions.	6.1	Develop and implement a corporate green procurement policy, which considers highest energy efficiency, life cycle cost/ benefit analysis in its requirements and evaluation.
		6.2	Establish policy for all new lighting (interior and exterior) to be replaced with energy efficient light bulbs.
		6.3	Develop a Green New Building Policy that requires any new municipal facilities be constructed to high environmental (energy efficiency) standards and in alignment with the GHG reduction target.
		6.4	Develop a Green Renovation Policy that requires the renovation of any municipal be executed to high environmental (energy efficiency) standards and in alignment with the GHG reduction target.
7	The Corporation commits to managing its energy in a way that reduces the burden on ratepayers.	7.1	Develop processes to provide departmental directors with information on the energy bills for their departments to review.
		7.2	Continually communicate with utility companies to ensure that utility bills reflect the accurate energy consumption of facilities.

TRANSPORTATION FOCUSED OBJECTIVES

#	Objectives	#	Action items
8	The Corporation commits to establishing policies and procedures that ensure its energy-using equipment is maintained and operated in a way that reduces energy use and greenhouse gas emissions.	8.1	Develop and implement a Green Fleet Strategy & replacement schedule. <ul style="list-style-type: none"> a. Right sizing vehicle/appropriate vehicle class (fit-for purpose vehicles) through replacement schedule b. Transitioning to low emission and alternative fuel vehicles (e.g. advanced natural gas, ethanol, hybrid, or electric vehicles) c. Deploy cost-effective idle reducing technology (e.g. LED lights, auxiliary batteries, automatic shut-off devices) d. Fuel and vehicle performance monitoring
		8.2	Eliminate underutilized or excess vehicles (excess availability of vehicles tends to lead to increased use).
		8.3	Accelerate, where practical and appropriate, the replacement of oldest, least-efficient vehicles.
		8.4	Develop a policy to substitute communications technology for transportation, such as virtual meetings or work from home policies (while also encouraging carpools).
		8.5	When purchasing new motorized equipment consider full life cycle costs and carbon intensity as per green procurement policy.
		8.6	Research living snow fences to reduce the need/ intensity of snow plowing in the winter.
9	The Corporation commits to ensure that it monitors and tracks energy use and greenhouse gas emissions to be able to measure progress against targets	9.1	Ensure that data systems for the Corporate fleet are capturing relevant data on distance travelled, fuel use, fuel and vehicle type, driver, etc. and that staff have knowledge in how to input, extract, and analyze data.
		9.2	Develop and implement a program that monitors and tracks community travel habits (determine community Vehicle Kilometer Travelled data, fuel consumption, vehicle characteristics, along with active transportation habits).
10	The Corporation commits to supporting sustainable transportation initiative.	10.1	Work with the Niagara Region to provide Citizens with alternative modes of travel.
		10.2	Encourage the continue advancement of broadband infrastructure throughout the Township to support citizens can telecommute to work.
		10.3	Update the Townships Active Transportation Master Plan and look into Share the Road's Bicycle Friendly Community program.

WASTE FOCUSED OBJECTIVES

#	Objectives	#	Action items
11	The Corporation commits to going paperless, reducing our paper usage where possible.	11.1	After staff indicate that they want to print a paper copy, a pop up asks if staff are sure that the document needs to be printed to encourage staff to reduce the number of sheets printed.
		11.2	The printers automatically default to two-sided printing, reducing the number of sheets printed.
12	The Corporation commits to reducing use of single-use plastics.	12.1	Eliminate the use of plastic water bottles from all staff and Council meetings.
13	The Corporation commits to increasing its diversion programs.	13.1	Prepare an inventory of municipal buildings & their associated waste audit status (not-completed, completed, implemented, etc.).
		13.2	Implement a facility assessment process to conduct regular waste audits on a rotational basis to identify opportunities for improved efficiency and produce annual waste report card.
		13.3	Develop a provision that insures the installation of proper bins in facilities.
		13.4	Ensure that the collection containers for the source separation program be located conveniently and properly sized, with adequate labeling and signage in order to encourage greater participation in diversion programs.
		13.5	Promote awareness of and encourage participation in the source separation program and ensure its continuing success.
		13.6	Ensure that organic bins are used wherever possible in all Township facilities (e.g. lunch rooms and washrooms).

AGRICULTURE, FORESTRY, AND OTHER LAND USE FOCUSED OBJECTIVES

#	Objectives	#	Action items
14	The Corporation commits to supporting a resilient land use network.	14.1	Support a farmer's market in summer and fall that provide residents access to local and affordable foods.
		14.2	Encourage environmental stewardship and conservation actions (e.g., tree planting, habitat enhancements).
		14.3	Create a GHG emissions agricultural inventory and forecast.
		14.4	Create a GHG sink inventory and forecast that considers both agriculture and trees.

Table 10: Actions to reduce GHG emissions



STAFF FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
1.1	The Green Team will continue to meet after this Plan is established to monitor and report on the Township's progress.	Dark Green	<ul style="list-style-type: none"> # of meetings % of members attending 	<ul style="list-style-type: none"> Green Team 	Low	\$	X	X	X
1.2	Develop a plan to provide all staff levels with appropriate climate change and sustainability messaging.	Dark Green	<ul style="list-style-type: none"> Communication distribution plan 	<ul style="list-style-type: none"> Green Team 	Low	\$	X		
2.1	Conduct a baseline assessment of staff's knowledge of their personal work place contributions to greenhouse gas emissions.	Dark Green	<ul style="list-style-type: none"> % of staff who completed assessment 	<ul style="list-style-type: none"> Green Team 	Low	\$	X		
2.2	Create a file under the shared network where all staff can easily find resources related to climate change and sustainability that are applicable to staff individual workplace roles and to the Corporation as a whole.	Dark Green	<ul style="list-style-type: none"> Creation of file # of resources in the file 	<ul style="list-style-type: none"> IT Green Team 	Low	\$	X		
2.3	Develop an ongoing climate change and sustainability training and awareness plan for all levels of staff that may include workshops, lunch and learns, or digital resources.	Yellow	<ul style="list-style-type: none"> # of training sessions % of staff attending # of topics tackled 	<ul style="list-style-type: none"> Green Team 	Low - Medium	\$-\$-\$	X	X	X

STAFF FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
3.1	Include climate change and sustainability rhetoric resembling greenhouse gas inventories, greenhouse gas reduction targets, energy use performance benchmarks, climate change action items, and the Township's commitment to the Partners for Climate Protection program into all applicable municipal plan.		<ul style="list-style-type: none"> # of plans edited % of new plans containing climate change rhetoric 	<ul style="list-style-type: none"> Planning 	Low	\$	X	X	X
3.2	Integrate climate change considerations within business decisions by adding it to staff reports, request for proposals, & request for tenders, etc. to ensure decisions are made in consideration of energy efficiency & greenhouse gas reduction targets & the Township's Partners for Climate Protection program commitment.		<ul style="list-style-type: none"> # of business decisions that consider climate change/sustainability 	<ul style="list-style-type: none"> SMT Planning 	Low - Medium	\$		X	X
3.3	Consider recommendations to update Emergency Management Plans, specifically the Hazard Identification Risk Assessment (HIRA) to include climate change impacts (i.e., extreme weather, wildfire, flooding, etc.) & how residents can be better prepared.		<ul style="list-style-type: none"> Updated Emergency Management Plan 	<ul style="list-style-type: none"> Fire Planning 	Low	\$		X	
3.4	Establish a Corporate Climate Change Revolving Fund to finance corporate energy retrofit projects.		<ul style="list-style-type: none"> Corporate Climate Change Fund 	<ul style="list-style-type: none"> Finance SMT 	Medium - High	\$\$		X	X
4.1	Develop a plan to provide citizens with appropriate climate change and sustainability messaging through the avenues of regular newsletters, water bills & tax bills, social media, and/or the Corporation's website.		<ul style="list-style-type: none"> # of messages provided to citizens 	<ul style="list-style-type: none"> Green Team IT 	Medium	\$	X	X	X

FACILITY FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
5.1	Continue to implement the Township's current energy Conservation and Demand Management Plan.		<ul style="list-style-type: none"> # of completed energy action items 	<ul style="list-style-type: none"> Facility operators Public Works 	Medium – High	\$-ICA	X	X	X
5.2	Benchmark energy use and targets against provincial standards.		<ul style="list-style-type: none"> Understanding benchmarks 	<ul style="list-style-type: none"> Facility operators Public Works 	Medium – High	\$	X	X	X
5.3	Prepare an inventory of municipal buildings & their associated energy audit status (not-completed, completed, implemented, etc.)		<ul style="list-style-type: none"> % of inventory completed 	<ul style="list-style-type: none"> Facility operators Green Team 	Medium – High	\$-\$\$		X	X
5.4	Implement a facility assessment process to conduct regular energy audits on a rotational basis to identify opportunities for improved efficiency and produce annual energy report card - prioritizing the top GHG emitting facilities.		<ul style="list-style-type: none"> # of audits # of report cards 	<ul style="list-style-type: none"> Green Team Facility operators 	Medium – High	\$-\$\$		X	X

FACILITY FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
6.1	Develop and implement a corporate green procurement policy, which considers highest energy efficiency, life cycle cost/ benefit analysis in its requirements and evaluation.		<ul style="list-style-type: none"> Corporate green procurement policy 	<ul style="list-style-type: none"> Finance 	Low - Medium	\$	X		
6.2	Establish policy for all new lighting (interior and exterior) to be replaced with energy efficient light bulbs.		<ul style="list-style-type: none"> Lighting policy 	<ul style="list-style-type: none"> Public Works 	Low - Medium	\$	X		
6.3	Develop a Green New Building Policy that requires any new municipal facilities be constructed to high environmental (energy efficiency) standards and in alignment with the greenhouse gas reduction target.		<ul style="list-style-type: none"> Green New Building Policy 	<ul style="list-style-type: none"> Planning 	High	\$	X		
6.4	Develop a Green Renovation Policy that requires the renovation of any municipal be executed to high environmental (energy efficiency) standards and in alignment with the greenhouse gas reduction target.		<ul style="list-style-type: none"> Green Renovation Policy 	<ul style="list-style-type: none"> Planning 	High	\$	X		
7.1	Develop processes to provide departmental directors with information on the energy bills for their departments to review.		<ul style="list-style-type: none"> # of updates to directors 	<ul style="list-style-type: none"> Green Team 	Medium	\$	X	X	X
7.2	Continually communicate with utility companies to ensure that utility bills reflect the accurate energy consumption of facilities.		<ul style="list-style-type: none"> # of interactions with utility companies 	<ul style="list-style-type: none"> Finance 	Low	\$	X	X	X

TRANSPORTATION FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
8.1	Develop and implement a Green Fleet Strategy & replacement schedule. e. Right sizing vehicle/appropriate vehicle class (fit-for purpose vehicles) through replacement schedule f. Transitioning to low emission and alternative fuel vehicles (e.g. advanced natural gas, ethanol, hybrid, or electric vehicles) g. Deploy cost-effective idle reducing technology (e.g. LED lights, auxiliary batteries, automatic shut-off devices) h. Fuel and vehicle performance monitoring		<ul style="list-style-type: none"> Green Fleet Strategy 	<ul style="list-style-type: none"> Fleet Manager Public Works Green Team 	Medium – High	\$\$\$- \$\$\$ \$\$	X		
8.2	Eliminate underutilized or excess vehicles. (Excess availability of vehicles tends to lead to increased use.)		<ul style="list-style-type: none"> # of elimination of underutilized vehicles 	<ul style="list-style-type: none"> Fleet Manager 	High	\$	X	X	X
8.3	Accelerate, where practical and appropriate, the replacement of oldest, least-efficient vehicles.		<ul style="list-style-type: none"> # of replaced vehicles 	<ul style="list-style-type: none"> Fleet Manager 	High	\$\$\$- ICA	X	X	X
8.4	Develop a policy to substitute communications technology for transportation, such as virtual meetings or work from home policies (while also encouraging carpools).		<ul style="list-style-type: none"> Green Work Policy 	<ul style="list-style-type: none"> Green Team SMT 	Medium – High	\$	X		
8.5	When purchasing new motorized equipment consider full life cycle costs and carbon intensity as per green procurement policy.		<ul style="list-style-type: none"> % of new vehicles that reflect the green procurement policy 	<ul style="list-style-type: none"> Fleet Manager 	High	\$\$\$- ICA	X	X	X

TRANSPORTATION FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
8.6	Research living snow fences to reduce the need/intensity of snow plowing in the winter.		<ul style="list-style-type: none"> # of hours of snow plowing required/season 	<ul style="list-style-type: none"> Public Works Planning 	Medium	\$\$- \$\$\$ \$	X	X	X
9.1	Ensure that data systems for the Corporate fleet are capturing relevant data on distance travelled, fuel use, fuel and vehicle type, driver, etc. and that staff have knowledge in how to input, extract, and analyze data.		<ul style="list-style-type: none"> Updated data recording system # of completed entries in system 	<ul style="list-style-type: none"> Fleet Manager Public Works Green Team 	Medium – High	\$	X		
10.1	Work with the Niagara Region to provide Citizens with alternative modes of travel.		<ul style="list-style-type: none"> # of citizens who's access to mobility has improved. 	<ul style="list-style-type: none"> Planning Public Works 	Low	\$\$	X	X	X
10.2	Encourage the continue advancement of broadband infrastructure throughout the Township to support citizens can telecommute to work.		<ul style="list-style-type: none"> % of citizens who's access to the internet has improved. 	<ul style="list-style-type: none"> CAO SMT 	Medium	\$\$\$- ICA	X	X	X
10.3	Update the Townships Active Transportation Master Plan and look into Share the Road's Bicycle Friendly Community program.		<ul style="list-style-type: none"> Updated Active Transportation Master Plan 	<ul style="list-style-type: none"> Planning Public Works 	Medium	\$\$- \$\$\$	X	X	X

WASTE FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
11.1	After staff indicate that they want to print a paper copy, a pop up asks if staff are sure that the document needs to be printed to encourage staff to reduce the number of sheets printed.		<ul style="list-style-type: none"> % reduction in use of paper 	<ul style="list-style-type: none"> IT 	Low	\$	X		
11.2	The printers automatically default to two-sided printing, reducing the number of sheets printed.		<ul style="list-style-type: none"> % reduction in use of paper 	<ul style="list-style-type: none"> IT 	Low	\$	X		
12.1	Eliminate the use of plastic water bottles from all staff and Council meetings.		<ul style="list-style-type: none"> % reduction in the waste of plastic 	<ul style="list-style-type: none"> Green Team 	Low	\$	X		
13.1	Prepare an inventory of municipal buildings & their associated waste audit status (not-completed, completed, implemented, etc.)		<ul style="list-style-type: none"> % of inventory completed 	<ul style="list-style-type: none"> Green Team 	Low	\$	X	X	
13.2	Implement a facility assessment process to conduct regular waste audits on a rotational basis to identify opportunities for improved efficiency and produce annual waste report card		<ul style="list-style-type: none"> # of audits # of report cards 	<ul style="list-style-type: none"> Green Team 	Low	\$-\$\$	X	X	X
13.3	Develop a provision that insures the installation of proper bins in facilities.		<ul style="list-style-type: none"> Provision for proper bins 	<ul style="list-style-type: none"> Green Team Facility operators 	Low	\$	X	X	
13.4	Ensure that the collection containers for the source separation program be located conveniently and properly sized, with adequate labeling and signage in order to encourage greater participation in diversion programs.		<ul style="list-style-type: none"> % of properly located bins % of properly sized bins % of properly labeled bins 	<ul style="list-style-type: none"> Green Team Facility operators 	Low	\$-\$\$	X	X	
13.5	Promote awareness of and encourage participation in the source separation program and ensure its continuing success.		<ul style="list-style-type: none"> # of educational tools provided 	<ul style="list-style-type: none"> Green Team 	Low	\$	X	X	X
13.6	Ensure that organic bins are used wherever possible in all Township facilities (e.g. lunch rooms and washrooms).		<ul style="list-style-type: none"> % of organic bins in lunch rooms. 	<ul style="list-style-type: none"> Green Team 	Low	\$	X	X	X

AGRICULTURAL, FORESTRY, AND OTHER LAND USE FOCUSED ACTIONS

#	Action items	EOI	Measure of Success	Personnel	CO2 Savings	Cost	Year		
							1	1-2	2-5
14.1	Support a farmer's market in summer and fall that provide residents access to local and affordable foods.		<ul style="list-style-type: none"> # of days the farmer's market is open 	<ul style="list-style-type: none"> Recreation Public Works 	Low	\$\$		X	X
14.2	Encourage environmental stewardship and conservation actions (e.g., tree planting, habitat enhancements).		<ul style="list-style-type: none"> # of annual stewardship actions 	<ul style="list-style-type: none"> Recreation Planning 	Low	\$- \$\$\$\$	X	X	X
14.3	Create a GHG emissions agricultural inventory and forecast.		<ul style="list-style-type: none"> A GHG emissions agricultural inventory 	<ul style="list-style-type: none"> Planning 	Low	\$	X	X	
14.4	Create a GHG sink inventory and forecast that considers both agriculture and trees.		<ul style="list-style-type: none"> A GHG sink inventory 	<ul style="list-style-type: none"> Planning 	Low	\$- \$\$\$		X	



OF
INCOLN
RATION

318

Facilities: Township Office and Council Chambers
Captured by: Meghan Birbeck
Captured on: September 26, 2019

CONCLUSION

This Plan puts the Township of West Lincoln in a position to take results-driven action towards 20% corporate and 5% community GHG reduction targets while also working towards further on-going Township priorities. This document builds upon the work already completed by the Township (i.e. municipal plans, building upgrades, and streetlight replacements) and encourages these actions to continue through a lens that supports GHG emission reduction. Many GHG and energy reduction actions are being pursued within existing municipal work plans and in many cases through initiatives driven by co-benefit priorities (i.e., cost-savings through retrofits and improvements, protection of land and waterway, health benefits for citizens).

With Council's endorsement of this CCAP the Township of West Lincoln will have completed Milestones 2 and 3 of the PCP program and will be closer to meeting the requirements of FCM's Municipalities for Climate Innovation Program, which helped fund the Plan. This endorsement will be followed up with the Green Team staff continue to:

1. Submit formal reports to the PCP Secretariat every 2 years on behalf of the Township, documenting West Lincoln's achievements in the PCP program to meet membership requirements,
2. Submit progress reports to the PCP program Secretariat to track actions and provide recognition as the Township advances through the milestone framework, and
3. Complete an annual PCP Members Survey, which will provide FCM with information that can be used to recognize the Township's achievements in FCM's yearly National Measures Report.

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