



2016 – 2023
Corporate Energy & Emissions
Township of The Archipelago



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ICECAP
INTEGRATED COMMUNITY
ENERGY & CLIMATE
ACTION PLANS



**GEORGIAN BAY
BIOSPHERE**
MNIDOO GAMII

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Glossary of Terms

Avoided Costs	Additional expenses that are not incurred as a result of efforts to reduce something.
Business as Usual	Continuing standard practices without any changes.
Community Emissions	Greenhouse gas emissions produced by residents and businesses within a jurisdiction.
Corporate Emissions	Greenhouse gas emissions produced by a local government's operations.
Emission Factor	A coefficient that describes the rate at which a given activity releases greenhouse gasses.
Energy Conservation	Reducing energy use by using fewer energy services.
Energy Efficiency	Completing a task using less energy than before.
Fuel Switching	The process of changing the primary source of energy used for a particular purpose or activity.
Global Warming Potential	A coefficient that enables the comparison of different greenhouse gasses.
ICECAP Members	First Nations and Municipalities who have joined the ICECAP partnership by signing a MOU.
ICECAP Partners	Those who participate in ICECAP without having signed the partnership's MOU.
Mitigation	Actions to limit climate change and its effects by reducing the emission of excess greenhouse gasses.
Net Zero	A state in which the greenhouse gasses going into the atmosphere are balanced by their removal.
Scope 1 Emissions	Direct emissions produced by Township owned and controlled assets.
Scope 2 Emissions	Indirect emissions resulting from the generation of electricity purchased by the Township.
Scope 3 Emissions	Emissions produced by assets not owned or controlled by the Township, but are part of its value chain.

Executive Summary

On August 18th, 2023 the Township of The Archipelago (Township) adopted its Corporate Climate Action Plan. The Township then adopted its Community Climate Action Plan on August 16th, 2024. During the adoption of these plans, the Township also passed a resolution adopting the following greenhouse gas (GHG) emissions reduction targets:

- Corporate: 30% GHG reduction from 2016 baseline levels by 2030
- Community: 6% GHG reduction from 2016 baseline levels by 2030
- Corporate & Community: Strive for net-zero by 2050

The goal of this report is to measure and monitor the Township's progress towards the **corporate** GHG emissions reduction target listed above. This report contributes to the collective objectives of the regional Integrated Communities Energy & Climate Action Plans (ICECAP) partnership, and serves as an ongoing deliverable to Milestone 5 of the Federation of Canadian Municipalities Partners for Climate Protection program. The purpose of this report is to:

- Measure progress towards the corporate GHG emissions reduction target;
- Understand trends in energy used during municipal operations;
- Understand trends in municipal energy expenditures;
- Identify opportunities for emissions reductions and energy cost-savings.

As of 2023, the Township's corporate GHG emissions have decreased by approximately 13.9% compared to the 2016 baseline year. An overview of current and baseline GHG emissions for the Township's corporate sectors can be found in Table 1.

Table 1: Corporate GHG Emissions by Sector

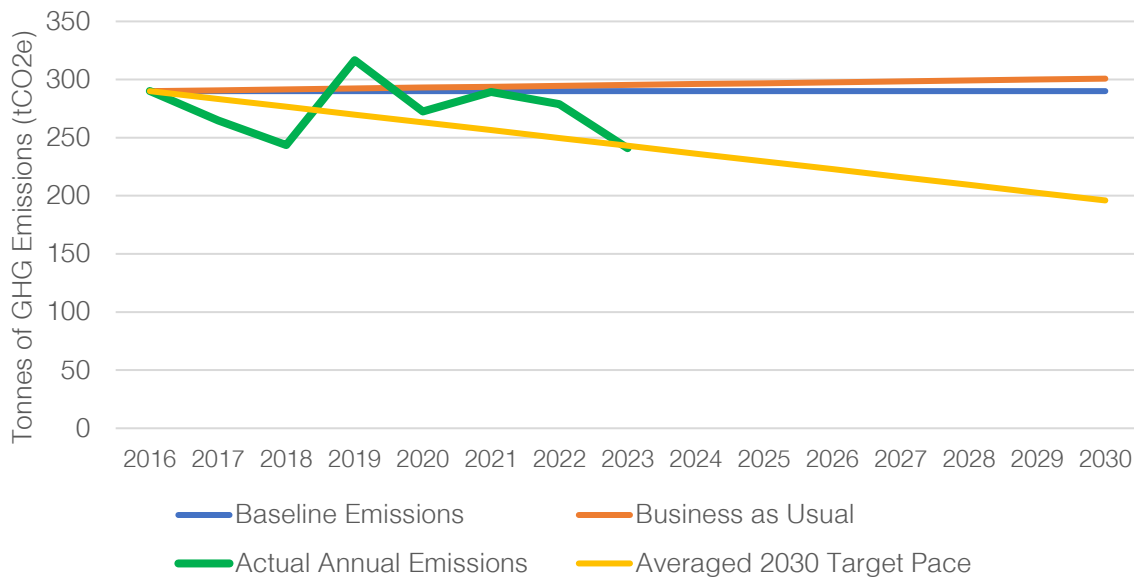
Emission Sector	2016 Emissions *	2023 Emissions *	% Change
Buildings	51	54	5.9
Streetlights	0	0	0.0
Fleet	228	176	-22.8
Waste	11	11	0.0
Total GHG Emissions	290	241	-16.9

* All GHG emissions are measured in terms of carbon dioxide equivalent (tCO₂e)

As seen in Figure 1, the Township is on track to meet its emissions reduction target. This is based on actual emissions levels being slightly below the pace of average annual emissions reductions needed to reach the 2030 target. On average, the Township would need to reduce its corporate emissions by 2.14% each year from the

2016 baseline to reach its 2030 target. To be on track with the 2030 target, the Township would need to have reduced corporate GHG emissions by approximately 15% as of 2023. However, actual emissions can fluctuate each year, meaning progress towards this target can change. Further momentum and implementation of the Corporate Climate Action Plan is needed to reach the Township’s 2030 target.

Figure 1: Corporate GHG Emissions Progress to 2030 Target



The amount of GHG emissions produced by the Township is dependent on the types and quantities of different energy sources it uses in its operations. As of 2023, much of the reductions in GHG emissions can be attributed to less diesel being used by the Township’s fleet. An overview of energy use by type and sector for last year and the 2016 baseline year can be found in Table 2.

Table 2: Corporate Energy Use Summary

Emission Sector	Energy	2016 Use	2023 Use	% Change
Buildings	Electricity (kWh)	150,939	157,419	4.3
	Natural Gas (m ³)	7,754	12,198	57
	Propane (L)	0	15,930	100
	Fuel Oil (L)	11,405	0	-100
Fleet	Gasoline (L)	32,273	30,062	-6.9
	Diesel (L)	56,014	33,385	-40.4
	Dyed Diesel (L)	0	5,453	100
Streetlights	Electricity (kWh)	8,709	8,382	-3.8

Despite a reduction in the use of many energy sources, the Township’s energy expenditures have increased over time. This is due to the rising costs of fossil fuels,

stemming from the highly volatile market conditions of these energy sources. In 2023 alone, the Township spent an additional \$31,671 on energy compared to the 2016 baseline year, despite using less. An overview of the change in energy expenditures between 2016 and 2023 for each energy type and sector can be found in Table 3.

Table 3: Corporate Energy Expenditures Summary

Emission Sector	Energy	2016 Costs (\$)	2023 Costs (\$)	% Change
Buildings	Electricity	31,715	30,541	-3.7
	Natural Gas	2464	8,574	248
	Propane	0	13,917	100
	Fuel Oil*	10,367	0	-100
Fleet	Gasoline*	34,898	47,016	34.7
	Diesel*	52,844	57,088	8.0
	Dyed Diesel*	0	7,161	100
Streetlights	Electricity	3,085	2,747	-10.9
Total:		135,373	167,044	23.3

*Estimated using local energy price data and actual consumption values.

Volatile market prices can cause energy expenditures to increase even when the quantity of that energy source has decreased. This means that energy sources with greater price stability can offer greater budget forecasting and resilience. A comparison of the percentage change between energy use and energy costs between 2023 and the 2016 baseline year can be found in Table 4.

Table 4: Comparison of Percentage Change in Corporate Energy Use and Costs

Emission Sector	Energy	Use Change (%)	Cost Change (%)
Buildings	Electricity	4.3	-3.7
	Natural Gas	57	248
	Propane	100	100
	Fuel Oil	-100	-100
Fleet	Gasoline	-6.9	34.7
	Diesel	-40.4	8.0
	Dyed Diesel	100	100
Streetlights	Electricity	-3.8	-10.9

Although there has been an increase in energy expenditures, the Township’s energy management and climate action efforts have mitigated cost increases. **Since 2016, the Township has cumulatively avoided approximately \$86,000 in additional energy costs as a result of its efforts to switch fuel sources, conserve energy, and use it more efficiently.**

As energy costs continue to rise, this will put added financial pressures on the Township, and in turn its ratepayers. Switching to more stable and reliable energy sources like electricity, along with energy efficiency and conservation efforts, have the potential to reduce and/or avoid additional energy costs, while also reducing GHG emissions.

Local governments have a unique interest and opportunity in planning for a changing climate. As front-line responders to severe weather events and other climate change impacts, local governments often experience and witness the financial, environmental, and social repercussions of climate change within their communities. Big or small, taking any form of action moves the Township in the right direction. Through continued implementation of its Corporate Climate Action Plan, the Township has an important climate leadership role by demonstrating that reducing GHG emissions is possible.

Through the analysis contained in this report, the Township's corporate climate action efforts to date have proven to deliver financial and environmental benefits. Along with the progress made by other ICECAP members in the eastern Georgian Bay region, collaborative climate action in the region is having a quantifiable impact in municipal operations. By accelerating progress in pursuit of its 2030 and 2050 targets, the Township can amplify the financial and environmental benefits of climate action on its municipal operations, to its community, and the broader region.

Introduction

ICECAP

Across the eastern Georgian Bay region, communities are taking climate action. Originating out of a shared desire to address climate change together, communities have joined to create the Integrated Communities Energy and Climate Action Plans (ICECAP) partnership. ICECAP is a partnership between the First Nations and municipalities in the region for the purpose of a collaborative, more cost-effective approach to energy management and the reduction of greenhouse gas (GHG) emissions for the operations of each member, their communities, and for the broader region. The Township joined the ICECAP partnership in 2019.

The 4 main objectives of ICECAP are to:

1. Encourage the reduction of greenhouse gas emissions
2. Improve energy efficiency
3. Reduce the use of and reliance on fossil fuels
4. Adapt to a changing climate by building greater resilience

To advance these objectives, the Township is participating in the Federation of Canadian Municipalities' Partners for Climate Protection Program.

What is the Federation of Canadian Municipalities?

The Federation of Canadian Municipalities (FCM) is the national voice for municipal governments in Canada. With a congregation of nearly 2,000 municipal members across the country, FCM advocates for municipalities to ensure their citizen's needs are reflected in federal policies and programs. Through this advocacy the FCM is able to provide funding and programs that help municipalities tackle local challenges, such as climate change, asset management, economic development, and more.

What is the Partners for Climate Protection Program?

The Partners for Climate Protection (PCP) program is designed to guide municipalities through the process of reducing GHG emissions through climate change and energy planning. In partnership with the International Council for Local Environmental Initiatives (ICLEI), the PCP program is administered by the FCM. Since the program's establishment in 1997, over 500 municipalities across Canada have joined, with the Township becoming a participant in 2019. The PCP program consists of a five-step framework consisting of the following milestones:



The PCP program looks at these milestones from two different perspectives; corporate and community. **Corporate** refers to the GHG emissions produced as a result of a local government’s operations and services. Its purpose is to identify the GHG emissions within a local government’s direct control or influence, and for which the local government is accountable for as a corporate entity. **Community** refers to the GHG emissions generated by the residents and businesses of the community.

Municipal Commitments & GHG Reduction Target

Following the PCP program and in alignment with its efforts in ICECAP, the Township of The Archipelago’s Council has adopted a Corporate Climate Action Plan and a Community Climate Action Plan. These are separate action plans, complete with their own set of actions and targets. Through these plans, the Township has also passed resolutions in which it will strive to achieve the following GHG reduction targets:

- Corporate: 30% GHG reduction from 2016 baseline levels by 2030
- Community: 6% GHG reduction from 2016 baseline levels by 2030
- Corporate & Community: Strive for net-zero by 2050

This report is part of the Township’s ongoing efforts to monitor and report its progress towards its reduction targets and is part of Milestone 5 of the PCP program.

Report Scope

This document will focus on **corporate** operations. The purpose of this report is to:

- Measure progress towards the corporate GHG emissions reduction target;
- Understand trends in energy used during municipal operations;
- Understand trends in municipal energy expenditures;
- Identify opportunities for emissions reductions and energy cost-savings.

METHODOLOGY BACKGROUND

Greenhouse Gas Emissions Scopes

GHG Emissions can be classified by scopes, as seen in Table X below. In producing a corporate GHG inventories, Scope 1 and 2 are mandatory requirements. Including Scope 3 emissions is optional, however, measuring Scope 3 emissions in which the Township has operational control is required by the PCP program.

Table X: GHG Emissions Scopes & Sources

Scope 1: Direct Emissions
Includes: Gasoline, Diesel, Natural Gas, Propane, Fuel Oil
Scope 2: Indirect Emissions
Includes: Electricity
Scope 3: Other Indirect Emissions
Includes: Corporate Waste

Baseline Year

Establishing a baseline is a critical component for identifying trends and establishing a benchmark for which progress will be based on. As part of its municipal commitments, and based on its past work in the PCP program, the Township has established a baseline year of 2016. This means, that unless otherwise stated, trends outlined in the report will be compared against this baseline year.

Greenhouse Gas Emissions Inventory

In addition to the GHG emission scopes listed above, Table X lists the parameters applied to the measurement of the Township’s corporate GHG emissions.

Table X: GHG Emissions Inventory Parameters

Measurement Approach:	Operational Control
Geographic Constraint:	Township of The Archipelago
Reporting Period:	2016 - 2023

Recognizing that the Township produces GHG emissions in different ways through its operations, GHG emissions can be grouped based on the type of asset, infrastructure, or service being provided. As per the PCP program, this report consolidates GHG emissions into the following emissions sources:

- Buildings and facilities;
- Streetlights;
- Fleet;
- Corporate waste

Emission Factors & Global Warming Potentials

Emission factors (EF) and global warming potentials (GWP) are a fundamental component of every formula used to measure GHG emissions. An emissions factor is a representative value that attempts to relate the quantity of a pollutant released into the atmosphere with an activity associated with the release of that pollutant. For example, grams (g) of carbon dioxide (CO₂) emitted per litre (L) of gasoline consumed. There are many factors that influence the values of emission factors, such as the technology used to consume the fuel source and the end user of that fuel. Therefore, as technologies improve and research on greenhouse gasses develop, the values of EF and GWP change over the years, resulting in both EF and GWP to be variable when compared across years.

To measure corporate GHG emissions, EF and GWP were collected from Environment and Climate Change Canada's (ECCC) annual *National Inventory Report (NIR): Greenhouse Gas Sources and Sinks in Canada* for the reporting year. It should be noted, however, that there is typically a two-year lag for ECCC to publish the NIR for each respective year. For example, the 2023 report will be published in 2025. As a result, the EF and GWP for 2022 have been applied to 2023 as it is the most recent data available. Moving forward, this means that the most recent reporting years may be subject to minor variations depending on EF and GWP changes in future NIRs.

System of Measurement

For the purposes of this report and baseline, GHG emission quantities are expressed in terms of *carbon dioxide equivalent (CO₂e)*.

Data Collection and Sources

Data was collected from municipal records where possible. Data quality was assessed on its accuracy, completeness, and whether it came from a reputable and trustworthy source. Given the quality of data retrieved, there is a high degree confidence in the accuracy of the GHG emissions measured in this report.

Sector	Data	Source	Data Quality	Notes
Buildings	Electricity Consumption	Municipal Records	High	Actual electricity consumption.
	Fuel Oil Consumption	Municipal Records	High	Actual fuel oil consumption.
	Natural Gas	Municipal Records	High	Actual natural gas consumption.
	Propane Consumption	Municipal Records	High	Actual propane consumption.
Streetlights	Electricity Consumption	Municipal Records	High	Actual electricity consumption.
Fleet	Diesel Consumption	Municipal Records	High	Actual diesel consumption.
	Gasoline Consumption	Municipal Records	High	Actual gasoline consumption.
Waste	Tonnes of Waste	Assumptions	Low	Based primarily on assumptions.
	Degradable Organic Carbon	PCP Protocol	Medium	Some assumptions made using municipal data.
	Landfill Characteristics	Municipal Records	Medium	Some assumptions made using staff comments.

Buildings & Facilities

The Township operates many buildings, facilities, and streetlights all of which consume electricity, and many of which consume either propane, natural gas, or fuel oil as a source for heating. As of 2023, the Township has increased the GHG emissions produced by its buildings and facilities compared to the 2016 baseline year. As seen in Figure 2, GHG emissions have increased by roughly 3 tCO₂e, or approximately 5.9%. These GHG emissions have been broken down in Figure 3 to show the emissions produced by the different energy sources used.

Figure 2: Total Buildings and Facilities GHG Emissions (2016 – 2023)

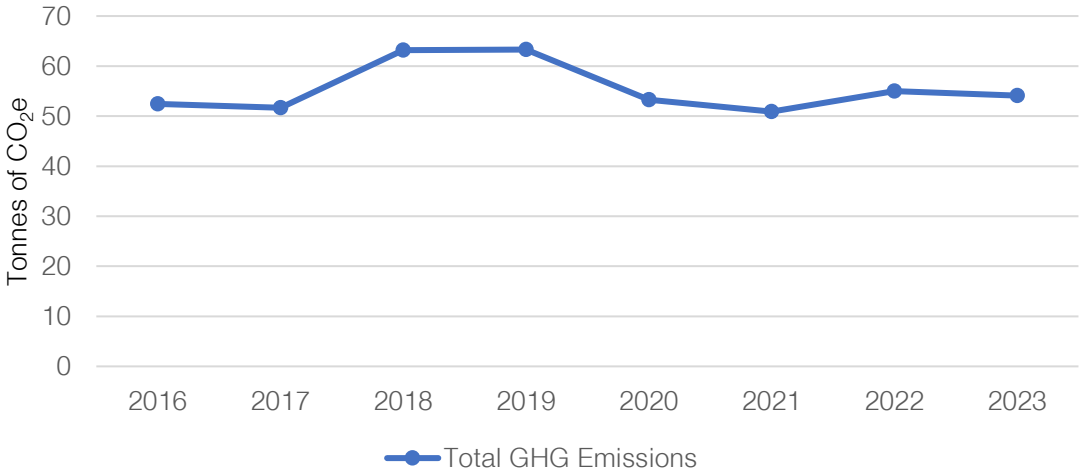
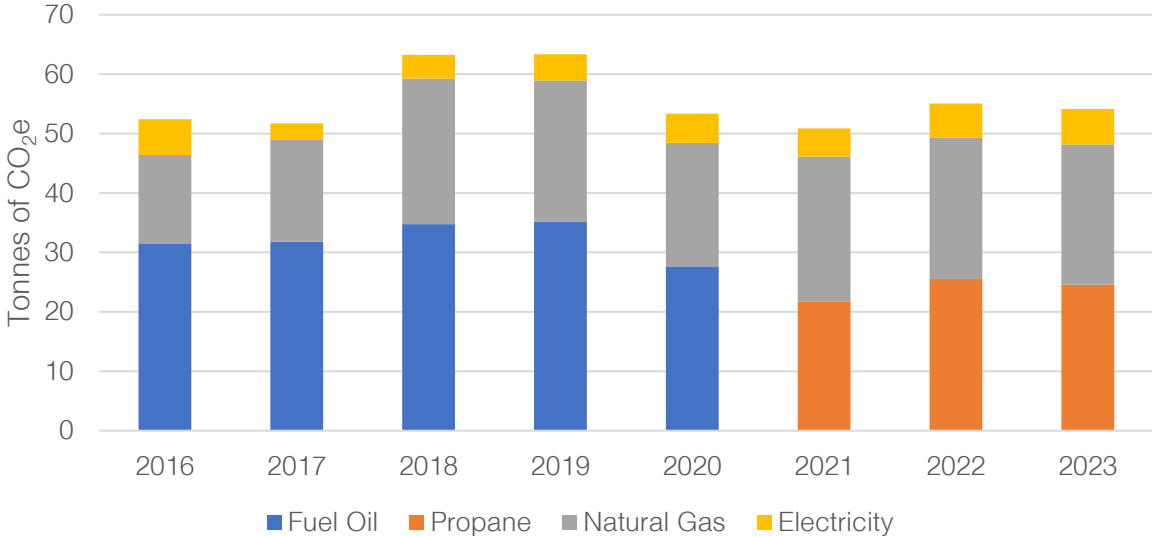
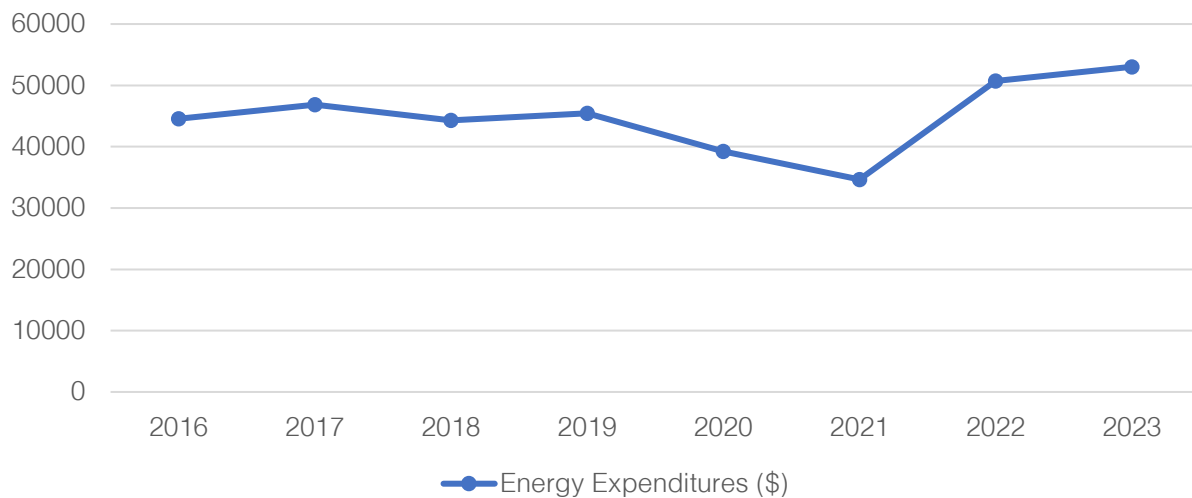


Figure 3: Buildings and Facilities GHG Emissions by Energy Source (2016 – 2023)



GHG emissions from buildings have risen due to the increased use of fossil fuels as an energy source for heating purposes. As the energy use in buildings has increased, so too have their energy expenditures. The growth in expenditures is compounded by the fact that the cost of fossil fuels has rapidly increased over the years as a result of their volatile market conditions. As seen in Figure 4, the Township's total energy expenditures for its buildings and facilities in 2023 have increased by \$8,491 compared to the 2016 baseline year, or roughly 19%.

Figure 4: Total Buildings and Facilities Energy Expenditures (2016 – 2023)



Although total energy expenditures for buildings and facilities have increased, the consumption and expenditures of individual energy sources has fluctuated more drastically over time. For example, electricity expenditures have decreased, while expenditures on propane and natural gas have increased over this time period. These trends are outlined in greater detail in the following sections of this report.

Electricity Consumption & Expenditures

Electricity consumption in municipal facilities is typically related to cooling, lighting, electronics, equipment, and appliances. There are many complex factors which influence electricity consumption at any given building or facility. For example, weather can impact consumption by increasing the demand for cooling on hotter days. Consumption for other purposes like lighting, electronics, equipment, and appliances is not directly impacted by the weather and is, instead, connected to staff and occupant usage patterns. As seen in Figure 5, electricity consumption has increased by roughly 4.3% compared to the 2016 baseline year. However, electricity expenditures have decreased by 3.7%, as seen in Figure 6.

Figure 5: Buildings and Facilities Electricity Consumption (2016 – 2023)

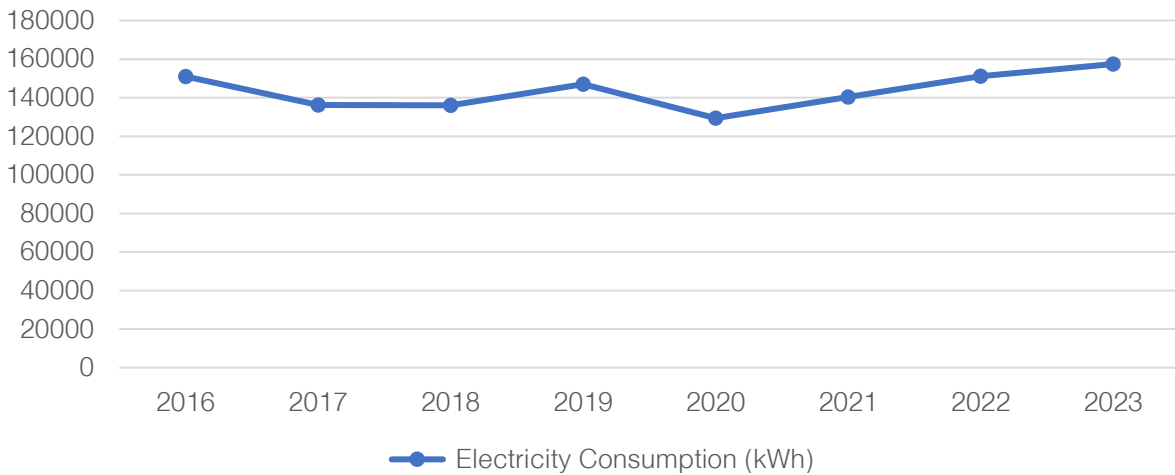
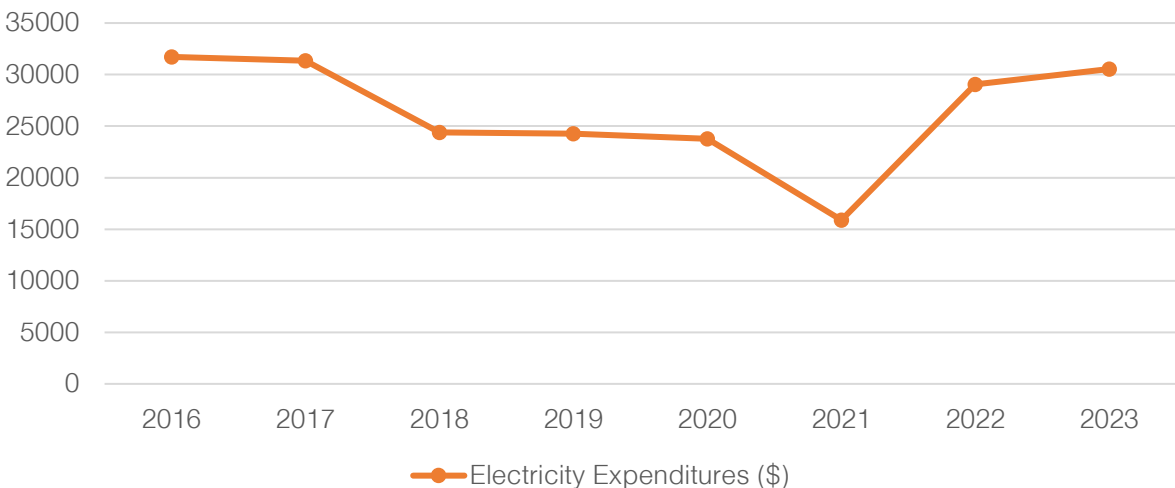


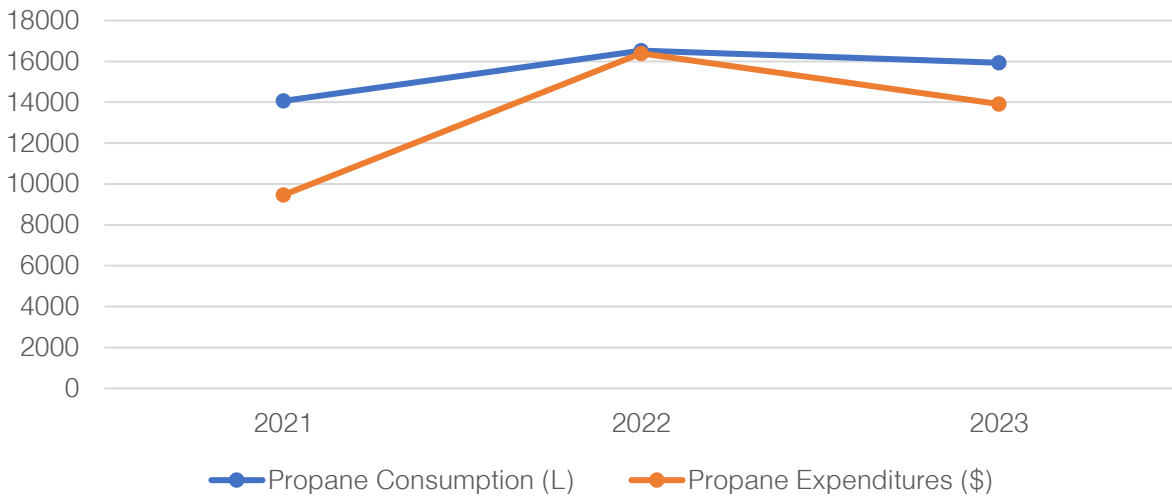
Figure 6: Buildings and Facilities Electricity Expenditures (2016 – 2023)



Propane Consumption & Expenditures

In 2021, the Township began using propane as an alternative heating source to fuel oil at the Pointe au Baril Community Centre. This means that there was no propane consumption and expenditures in the baseline year that could be used to compare current trends. As seen in Figure 7, looking back to when the Township began using propane, consumption has increased by approximately 13%, and expenditures have increased by approximately 47%, or \$4,454.

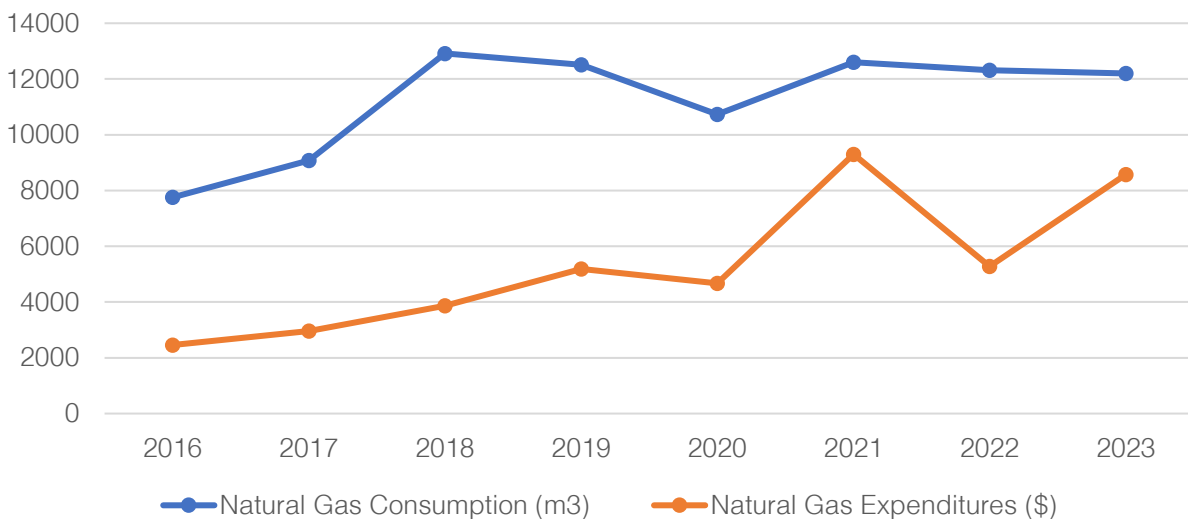
Figure 7: Buildings and Facilities Propane Consumption & Expenditures (2016 – 2023)



Natural Gas Consumption & Expenditures

As of 2023, natural gas consumption has increased roughly 57% compared to the 2016 baseline year. As seen in Figure 8, natural gas expenditures have increased at a rate faster than consumption growth, increasing by roughly 248% or \$6,115.

Figure 8: Buildings and Facilities Natural Gas Consumption & Expenditures (2016 – 2023)

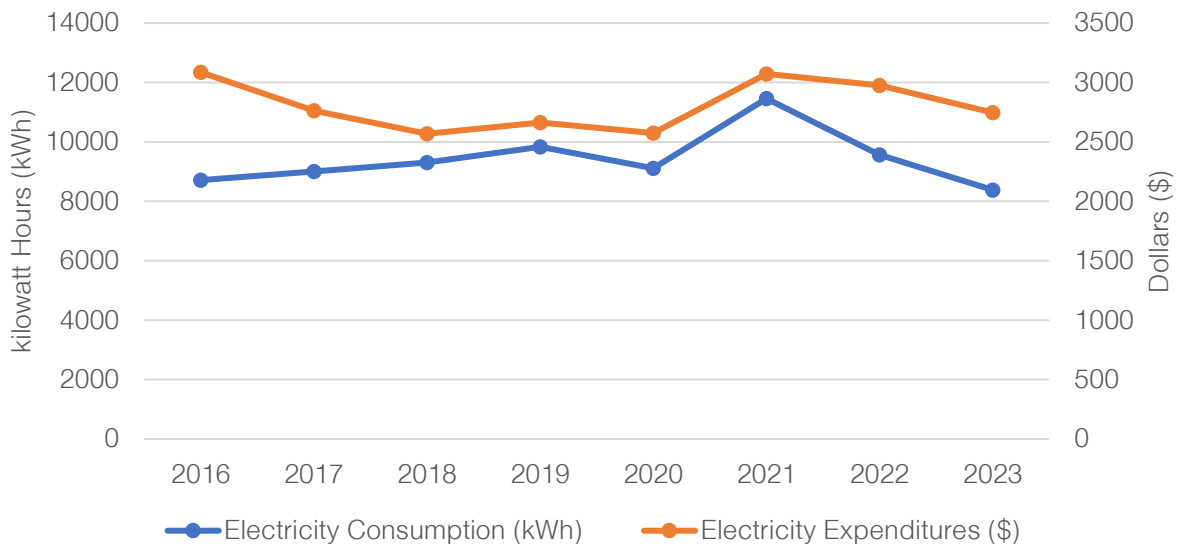


Note: Data on natural gas use and costs were not available for all facilities in 2016. Some assumptions made based on actual usage and costs from other years and Archipelago facilities.

Streetlights

The Township operates multiple outdoor ambient lights and streetlights at its facilities, and on some of its roads. All of these lights use electricity. As seen in Figure 9, as of 2023, streetlight electricity consumption has decreased by 3.8% compared to the 2016 baseline. In the same period, electricity expenditures have decreased as well, with a drop of 10.9% in 2023 relative to the baseline.

Figure 9: Streetlights Electricity Consumption & Expenditures (2016 – 2023)



Fleet

The Township relies on its fleet of vehicles and equipment to maintain roads and parks, provide bylaw enforcement, and many other community services. These vehicles and equipment are essential; however, they produce a substantial portion of the Township’s corporate GHG emissions. As seen in Figure 10, GHG emissions produced by the fleet in 2023 have decreased by a total of 52 tCO₂e, or approximately 22.8% as compared to the 2016 baseline year. This decrease in fleet emissions is responsible for the Township’s overall reduction in corporate GHG emissions. As seen in Figure 11, GHG emissions produced by the fleet have been broken down by fuel type. It should be noted that individual vehicle classification, age, fuel use, and specifications influence the quantity of GHG emissions produced by each fuel type.

Figure 10: Total Fleet GHG Emissions (2016 – 2023)

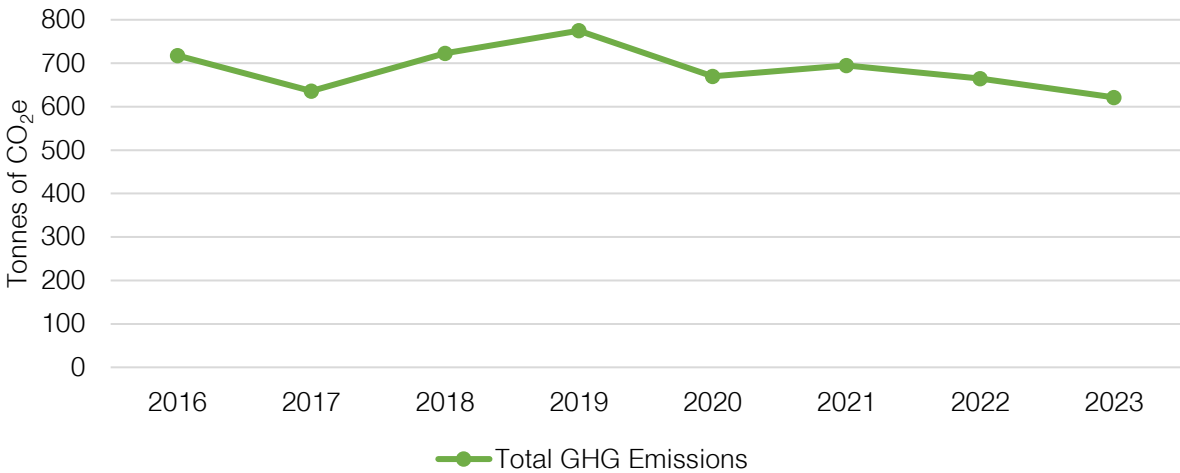
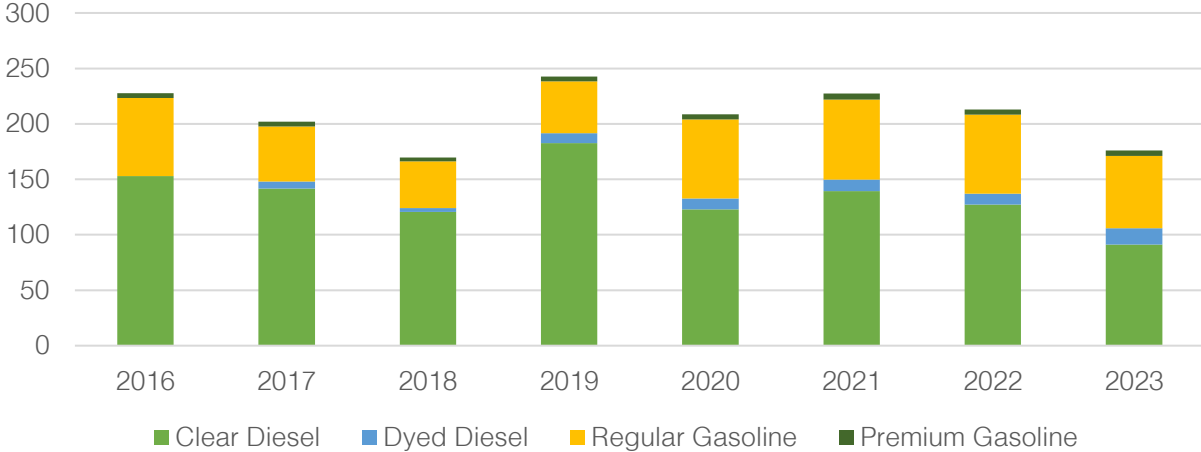
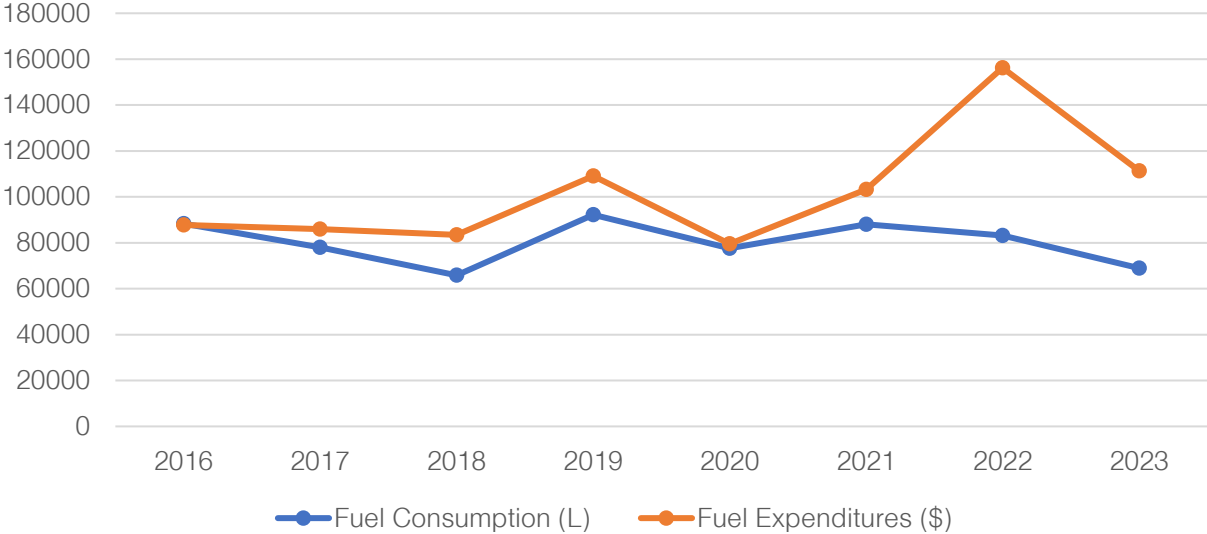


Figure 11: Total Fleet GHG Emissions by Fuel Type (2016 – 2023)



The cost of fuels has steadily increased over the years. Despite a reduction in fleet emissions, and total fuel consumption decreasing by roughly 19,390L in 2023 compared to the 2016 baseline year, total fuel expenditures have increased by approximately \$23,524 or 26.8%. This can be seen in Figure 12 below.

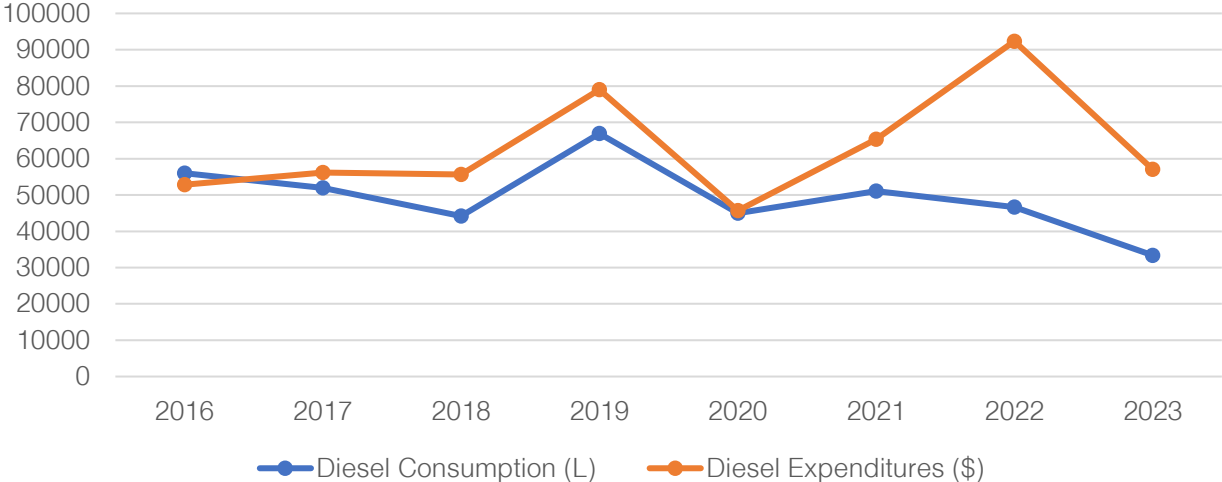
Figure 12: Total Fleet Fuel Consumption and Expenditures (2016 – 2023)



Diesel Consumption & Expenditures

As of 2023, diesel consumption has decreased by roughly 22,629L, or 40.4% compared to the 2016 baseline year. Despite this decrease in diesel consumption, diesel expenditures have increased by approximately \$4,244 or 8%.

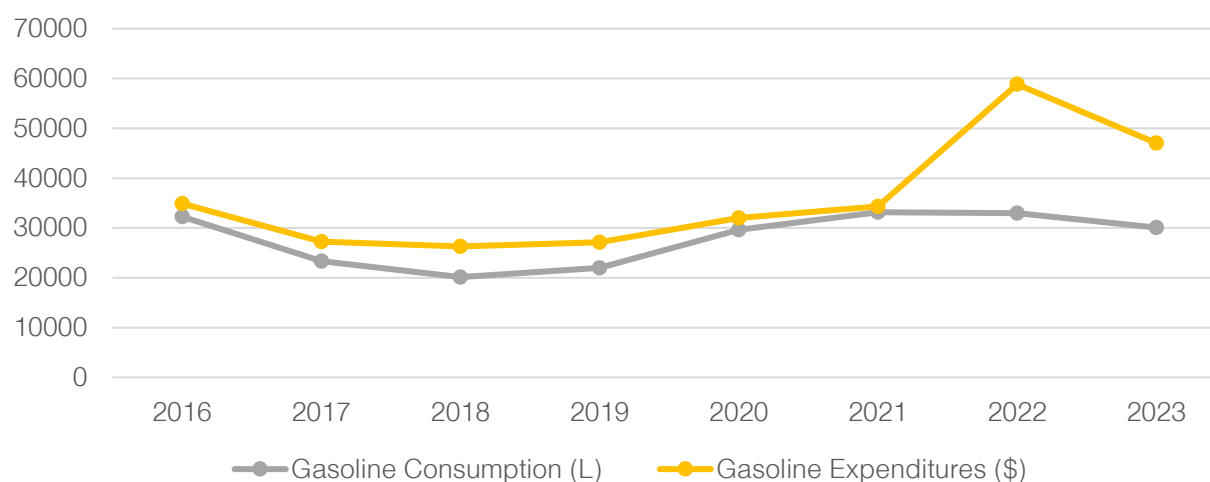
Figure 13: Total Diesel Consumption and Expenditures (2016 – 2023)



Gasoline Consumption & Expenditures

As of 2023, gasoline consumption has decreased by approximately 6.9% compared to the 2016 baseline year. However, as seen in Figure 14, gasoline expenditures have increased by 34.7% or approximately \$12,120, despite using less overall.

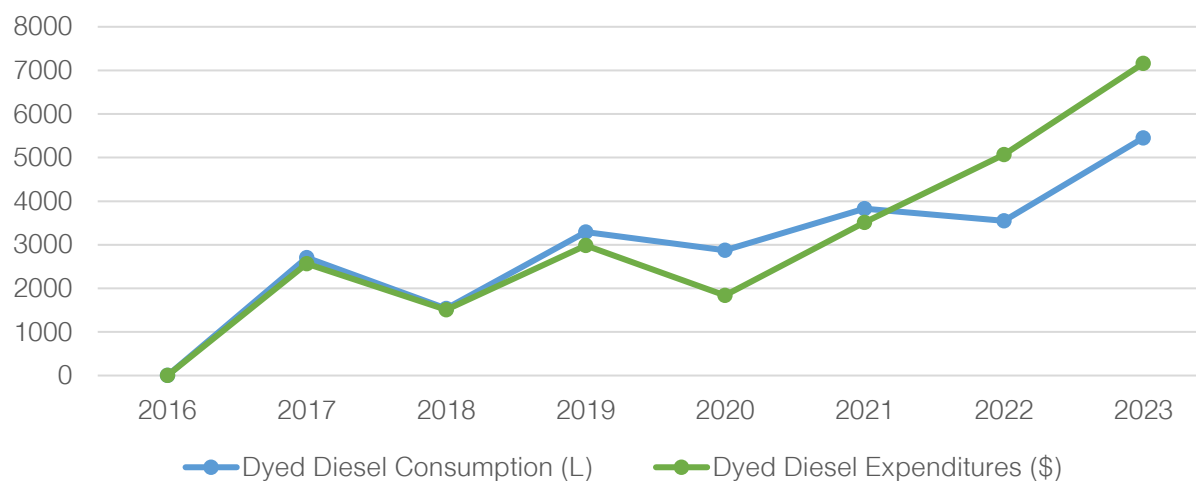
Figure 14: Total Gasoline Consumption and Expenditures (2016 – 2023)



Dyed Diesel Consumption & Expenditures

As of 2023, dyed diesel consumption has increased by 5,453L compared to the 2016 baseline year. As seen in Figure 15, this increase in dyed diesel consumption has resulted in dyed diesel expenditures to grow by \$7,161.

Figure 15: Total Dyed Diesel Consumption and Expenditures (2016 – 2023)



Solid Waste

In addition to waste generated during operations, the Township offers waste disposal services to the community at its municipal facilities and recreation areas. Together, these two forms of waste production comprise what is known as corporate solid waste. When this waste is diverted to a landfill it produces methane, a powerful greenhouse gas. This process occurs over many years, which means the methane generated in landfills today is the result of decades of disposed waste. As a result, these emissions must be measured and managed differently from those related to the use of fossil fuels and electricity, since they do not come from the consumption of energy.

Compared to other sources of GHG emissions, solid waste emissions are more difficult to measure and monitor. Unlike energy consumption and expenditures which can be measured and monitored via utility bills, the Township does not currently measure the amount and/or types of solid waste that is generated through operations. Given that other key variables and assumptions for calculating corporate solid waste emissions have remained unchanged, it was therefore assumed that corporate solid waste emissions in 2023 stayed at the same level as in the 2016 baseline year, totaling 11 tCO₂e. Should additional and/or updated information become available in the future, this assumption and measurement of corporate solid waste emissions will be updated.

Avoided Energy Costs

Avoided costs refer to the incremental expenses that are not incurred, or are mitigated as a result of implementing measures to limit the amount of an input used or output produced. In the case of energy, avoided costs can refer to the energy costs avoided as a result of energy efficiency, conservation, and/or fuel-switching efforts that limit the types and/or quantities of energy used. For the Township, avoided energy costs can assess the effectiveness of its energy management efforts and initiatives.

Avoided costs are different from cost savings. Cost savings are achieved when overall spending or actual expenditures decrease. Avoided costs, on the other hand, can still be achieved even when overall spending or actual expenditures increase.

Even though the Township is spending more on energy compared to the 2016 baseline year, its energy management efforts have helped mitigate the increase in energy expenditures. In fact, since 2016 the Township has avoided approximately \$86,000 in additional energy costs as a result of its efforts to conserve and use energy more efficiently. With the price of different energy sources anticipated to increase in the future, further energy management efforts through the Township's Corporate Climate Action Plan can help achieve even greater avoided energy costs.

An overview of avoided energy costs by fuel types and sector for each year since the 2016 baseline can be found in Figure 15 below. Note that a positive value indicates an avoided cost, whereas a negative value indicates that incremental costs have increased. Benchmarking against the 2016 baseline year accounts for fluctuations in the prices of energy and fuels, and is based on the average annual price paid by the Township for each energy source.

Table 8: Total and Annual Avoided Energy Costs

	2016	2017	2018	2019	2020	2021	2022	2023	Total
Avoided Electricity Costs in Buildings	\$ -	-\$ 3,564	\$ 2,688	\$ 662	\$ 3,964	\$ 1,198	-\$ 44	-\$ 1,257	\$ 3,646
Avoided Natural Gas Costs in Buildings	\$ -	-\$ 431	-\$ 1,545	-\$ 1,974	-\$ 1,296	-\$ 3,575	-\$ 1,955	-\$ 3,124	-\$ 13,900
Avoided Propane Costs in Buildings	\$ -	-\$ 93	-\$ 1,477	-\$ 1,649	\$ 1,465	-\$ 1,790	-\$ 5,081	-\$ 3,953	-\$ 12,579
Avoided Electricity Costs in Streetlights	\$ -	-\$ 90	-\$ 164	-\$ 304	-\$ 113	-\$ 737	-\$ 265	\$ 107	-\$ 1,565
Avoided Diesel Costs in Fleet	\$ -	\$ 4,408	\$ 14,929	-\$ 12,876	\$ 11,153	\$ 6,319	\$ 18,569	\$ 38,696	\$ 81,198
Avoided Gasoline Costs in Fleet	\$ -	\$ 11,374	\$ 16,823	\$ 13,778	\$ 3,841	\$ 2,937	-\$ 120	\$ 5,277	\$ 53,909
Avoided Dyed Diesel Costs in Fleet	\$ -	-\$ 2,567	-\$ 1,506	-\$ 2,981	-\$ 1,840	-\$ 3,513	-\$ 5,071	-\$ 7,161	-\$ 24,640
Total Annual Avoided Energy Costs	\$ -	\$ 9,036	\$ 29,748	-\$ 5,344	\$ 17,173	\$ 840	\$ 6,031	\$ 28,585	\$ 86,069

Thank You Miigwech

This report has been developed in partnership with the Georgian Bay Mnidoo Gamii Biosphere (GBB).

The GBB is an inclusive and dynamic organization that builds capacity for regional sustainability in eastern Georgian Bay, a UNESCO designated world Biosphere.

The GBB is a non-profit registered Canadian charity governed by a Board of Directors.

For more information, please visit:

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