



To: Mayor and Council
 From: Richard Grant, Planner I
 Date: September 19th, 2024
 Committee of the Whole Date: September 23rd, 2024
 Title: Climate Action Plan – Milestone 1 Completion

- For Direction
- For Information
- For Adoption
- Attachments- 6 Pages

Recommendation: That Council receive this report for information.

Purpose: To update the Council on completing Milestone 1 of the Partners for Climate Protection (PCP) 5-Step Milestone Framework and outline the next steps to initiating work on Milestone 2.

Background: Partners for Climate Protection (PCP) 5-Step Milestone Framework & the Climate Protection Working Group (CPWG)

The Partners for Climate Protection program guides participating municipalities through a five-step Milestone Framework designed to foster collective community action on the climate crisis by employing strategies to reduce the production of greenhouse gas (GHG) emissions and implementing effective green energy initiatives. The Milestone Framework encourages members to set midterm and long-term GHG reduction targets to meet the ambitious federal and international recommendations.

The Intergovernmental Panel on Climate Change (IPCC) recommends a GHG reduction target of 45% reduction from baseline by 2030 and net zero by 2050. Net-zero GHG reduction refers to the balance between the amount of GHG produced and the amount removed from the atmosphere. The PCP 5-Step Milestone Framework is founded on the belief that net-zero emissions can be achieved through a combination of emission reduction and emission removal.

From 2019 to 2020, early work was done on Milestone 1 of the Milestone Framework; however, it was never completed due to insufficient staff capacity, the impact of the COVID-19 pandemic, and challenges in sourcing the appropriate data for the baseline emissions inventory. Renewed interest in completing the Milestone Framework began shortly after with the creation of the Climate Protection Working Group in March 2023.

The Climate Protection Working Group was established to provide advice and recommendations to Council to assist in developing the Climate Action Plan to fulfil the Partners for Climate Protection Milestones. Through this work, the Working Group will assist Council and Smiths Falls residents in formulating and taking action to reduce community-wide GHG emissions and improve the adaptive capacity and resilience of the community to cope with and adapt to the local impacts of climate change events.

Milestone 1 – Corporate Emissions Inventory & Business-as-Usual Forecast

Milestone 1, the first of five steps in the PCP Milestone Framework, requires the creation of a greenhouse gas (GHG) emissions baseline inventory and forecasting the corporate and community aspects of the Town's overall GHG consumption. A corporate or municipal GHG inventory outlines the GHG emissions generated from the Town's operations and services. The purpose is to identify the GHG emissions within the Town's direct control and influence and for which the Town, as a corporation, is responsible.

The PCP program guides participants through a 5-step Milestone Framework. Municipalities can focus on corporate (the Town) or community actions but are encouraged to look at both. The milestones are as follows:

- Milestone 1 - Create a Baseline Emissions Inventory and Forecast.
- Milestone 2 - Set Emissions Reduction Targets.
- Milestone 3 - Develop a Local Action Plan.
- Milestone 4 - Implement the Local Action Plan; and
- Milestone 5 - Monitor Progress and Report Results.

Milestone 1 involves creating a greenhouse gas emissions inventory and forecast by gathering data on community and corporate energy use and solid waste generation. Milestone 1 reveals how a community or corporate organization consumes energy and generates waste. The inventory process also provides the necessary baseline data against which progress will be measured. By measuring emission production and energy consumption levels at regular intervals, a municipality can see whether its community or corporate organization is reducing emissions and energy consumption or continuing along a business-as-usual trajectory.

The corporate GHG inventory is designed to capture GHG emissions attributable to local government operations. It includes emissions arising from the use of all significant assets and services, including:

- Buildings and Facilities
- Fleet Vehicles
- Streetlights and Traffic Signals
- Water and Wastewater Infrastructure
- Corporate Solid Waste

Using 2021 as the baseline year, staff reassembled the original 2019-2020 Corporate Emissions Inventory data for Milestone 1 to create an updated baseline, initiated after a second review of the corporate emissions inventory selection criteria. Reviewing the Town-owned and operated buildings and facilities included in the initial count of the 2021 Corporate Emissions Inventory data revealed that only the major buildings and facilities, such as the Town hall and the Public Works Yard, were included.

The Business-as-Usual (BAU) Forecast is determined in Milestone 1, which forecasts the rate of GHG emissions for the Town (both corporately and community-wide) if things continue on the current trajectory to 2030. That is, if the Town does not implement any of the GHG emission reduction and climate change mitigation efforts that would be proposed in a climate action plan. The BAU timeline follows the 10-year commitment that the Town has made, with the established baseline of 2021.

With 2021 as the baseline year, the Town produced 1,706 tCO₂e/yr (tonnes of CO₂ per year) and 49,503 GJ/yr (gigajoule of energy per year). Of the Corporation’s overall GHG emissions, the three largest sectors are “Corporate Buildings & Facilities” at 27%, “Water Treatment Infrastructure” at 28% and “Sewage Treatment Infrastructure” at 32%. Water Treatment Infrastructure refers to all town-owned infrastructure for processing and treating water; similar to the sewage treatment infrastructure, it reflects the town’s overall GHG emission production and energy consumption.

Please note that regarding “Corporate Solid Waste,” there will not be a value for energy consumption, as waste does not *produce* energy. The BAU forecasted, using an annual population growth of 1.13% derived from background research for the Lands Needs Study (2021) and a total increase of 12% overall, has projected GHG emissions of approximately 1,900 tCO₂e by 2030. Please note that the projected annual increase in GHG emissions is a theoretical calculation based on an annual population growth rate of 1.13%.

Using the Milestone Framework, an assessment of the Town’s emissions and energy consumption in Milestone 1 allows for a strategic approach to reducing GHG emissions and implementing energy-saving measures. Throughout this process, one can determine areas for improvement and develop a strategy that prioritizes the energy subsectors for improvement. Table 1—Corporate GHG Emissions and Energy Consumption summarizes baseline GHG emissions and energy consumption for the different energy subsectors.

TABLE 1 CORPORATE GHG EMISSIONS & ENERGY CONSUMPTION TABLE

Energy Sectors	Emissions (tonnes)		Energy (GJ)	
Water Treatment Infrastructure	476	28%	14768	30%
Sewage Treatment Infrastructure	542	32%	17771	36%
Streetlights	12.25	1%	1550	3%
Corporate Fleet	158.35	9%	2392	5%
Corporate Building & Other facilities	455.32	27%	13022	26%
Corporate Solid Waste	63.7	4%	N/A	N/A

Please see Appendix A – Corporate Emissions Inventory Summary Table & Business-as-Usual Forecast.

The rationale for assessing the Town’s energy sectors by GHG emissions and energy consumption is to provide a holistic view of where energy is used and how much GHG emissions. For example, with this information, the Town understands that the streetlights contribute only 1% of the Town’s overall emissions but use 3% of its overall energy use in part because they were recently upgraded with LED lights. It should be noted that emissions produced do not directly correlate to energy consumed. This can be seen in the Town’s fleet, which produces 9% of the Town’s overall emissions while consuming 5% of its overall energy. The difference in those values can partly be attributed to a mixed fleet of electric and fossil-fuel-using vehicles.

Milestone 1 – Community Emissions Inventory & Business-as-Usual Forecast

In contrast, the community GHG inventory involves a much larger scope, estimating the GHG emissions generated within the community as a whole. While the Town may have limited control/influence over certain community activities, the primary intent of recording

the community GHG emissions is to document, as accurately as possible, the GHG emissions arising from all significant activities within the municipal boundaries of the community. This includes emissions generated by residential energy consumption and on-road transportation.

The Community GHG Emissions Inventory assessed five activities/energy sectors:

- 1) Stationary Energy;
- 2) Transportation;
- 3) Waste: Community Solid Waste and Wastewater
- 4) Agriculture, Forestry, and Other Land Uses (AFOLU); and,
- 5) Industrial Processes and Product Use (IPPU).

Stationary Energy: Residential, Institutional, Commercial and Industrial Buildings

The residential, institutional, commercial, and industrial (RICI) building sectors, all subsectors of Stationary Energy, track GHG emissions associated with energy use in buildings and within each sector. Emissions in these sectors can be produced directly from stationary combustion of fuels (e.g., natural gas use in boilers and furnaces) or indirectly from grid-supplied electricity or direct energy.

All direct and indirect emissions generated using energy from the RICI building sectors were sourced from Hydro One and Enbridge consumption data. Please note that the methodology and data sources comply with PCP standards (See *Appendix 'B' - Community Emissions Inventory Summary Table, Business-as-Usual Forecast and Methodology* for more details). Energy and emissions consumption data were disaggregated by each subsector (i.e., residential). In 2021, residential accounted for 16.5%, 16% for commercial and institutional use, and 11.5% for industrial use of the total amount of GHG (tCO₂e) consumed. In other words, 44% of the Town's GHG emissions come from the Stationary Energy sector, which only includes buildings.

On-Road Transportation

The community transportation energy sector comprises five subsectors: (1) on-road, (2) off-road, (3) railway, (4) waterborne navigation, and (5) aviation. Of the five subsectors, only the on-road transportation was accounted for, as it had the most applicability. The On-Road transportation sector tracks GHG emissions from vehicles travelling within the community. Emissions in this sector can be produced directly from using fuels, such as gasoline or diesel, or indirectly from grid-supplied electricity (e.g., plug-in electric vehicles). All direct and indirect emissions generated by the use of motor fuels (including electricity) in on-road vehicles.

The fuel sales approach, which involves obtaining records of the total amount of automotive fuel purchased within the community, was used to calculate the GHG emissions from the community transportation sector. This exercise was completed by Kalibrate Canada, a third-party company specializing in generating data analysis, with transportation data being one of its specialties.

On-road transportation accounts for roughly half of the Town's total GHG emissions at 52% through an assessment of 6 fuel sales outlets operating in 2021. Please note that staff have acknowledged that the high value of the transportation data may be attributed to using the

Fuel Sales approach, which assesses the total amount of automotive fuel purchased within the community.

However, this approach, although the simplest to accomplish in terms of data collection and replication, may not always be complete due to the inclusion of fuel volumes used by vehicles travelling through the community on major roads, such as the Town's thoroughfare, Beckwith Street, which forms part of Highway 15. Please note that this approach only considers the amount of fuel consumed in Smiths Falls for 2021.

Staff did not include off-road, railway, waterborne navigation and aviation in the final review of the Transportation Sector due to ineligible applicability and/or insufficient GHG emissions inventory assessment methodology. Moreover, in the opinion of Staff, it was not considered to have a major impact on the creation of the Climate Action Plan.

Solid Waste

The community solid waste sector assessment tracks methane (CH₄) emissions that enter the air directly as waste decomposes at landfills, as well as nitrous oxide (N₂O), and other non-biogenic carbon dioxide (CO₂) emissions associated with the combustion of solid waste at incineration facilities.

Since the Town does not possess a solid waste processing facility, the downstream emissions generated from solid waste disposed at landfills outside the community (i.e., the GHG emissions related to the transportation/collection of solid waste, excluding waste diverted via recycling and/or composting.) were calculated using the "Methane Commitment" approach.

This approach (also known as the "total yield gas" method) estimates the total downstream methane emissions generated throughout the waste's decomposition, measuring the emissions generated from solid waste disposed at a landfill without a Landfill Gas Collection and Utilization (LFG) system. The LFG system reduces GHG emissions from the landfill, generates renewable "green" energy, and reduces odours in and surrounding the landfill site.

Solid waste accounts for only 4% of the Town's overall GHG emissions. Please note that Community Solid Waste refers to the waste collected for the entire Town. This value differs from Corporate Solid Waste, which reflects the waste collected from Town-owned facilities and buildings.

Wastewater and Sewage Treatment Infrastructure (Non-energy related emissions)

The sewage sub-sector tracks energy consumption and the corresponding GHG emissions generated by municipal wastewater infrastructure, such as lift and pumping stations, reservoirs and storage tanks, and treatment facilities. The community and sewage sector tracks the GHG emissions generated from the Town's Wastewater Treatment Facility using the "Population-based" method. In Smiths Falls, the Wastewater Treatment facility also services the Atironto subdivision in Montague Township.

The wastewater and sewage sector contributed the lowest to the Town's community GHG emissions, at less than 0.1%, using the "Population-based" method. Using the town's current population from the most recent statistical census data, the GHG emissions are

calculated based on the methane (CH₄) emission factor, an approach widely used in major urban areas for its simplicity and ease of use.

Please note that the GHG emissions only reflect the fugitive (non-energy-related) emissions generated from wastewater resulting from the treatment and cleaning of sewage and waste—the energy-related emissions for wastewater amount to 32% of the Corporation’s overall emissions.

Industrial Processes and Product Use (IPPU) & Agriculture, Forestry and Other Land Use (AFOLU)

The IPPU sector deals with non-energy-related emissions from industrial processes and product use, such as mineral products, chemical industries, and metal production. Staff reviewed the IPPU sector and determined that, despite being industrial in nature, the existing manufacturing and construction-related businesses did not qualify for inclusion in this sector—they were assessed in the Stationary Energy sector.

The AFOLU sector includes agriculture, forestry, and other land uses, such as managed forests and classified wetlands. Staff reviewed the AFOLU sector to ensure that all relevant areas of concern, such as wetlands and urban tree canopy, are properly evaluated. It was the opinion of Staff that the potential inclusion of eligible land uses, such as the existing Provincially Significant Wetland, into this sector was not appropriate without the proper GHG emission assessment methodology.

Various assessment methodologies exist; however, there is not enough information to apply the existing approaches, such as defining the GHG emissions by type of wetland and landmass. Moreover, unless the size and scale of the existing wetlands are diminished in any way, the GHG emissions output and carbon sequestration potential should stay the same (if everything else remains constant). Staff will continue to review the AFOLU sector once an appropriate and applicable GHG emissions assessment methodology is available.

Community Business-as-Usual Forecast

Similar to the Corporate BAU, using the annual growth rate of 1.13% derived from the Background Research for the Lands Needs Study (2021) and a projected total increase of 11% in GHG emissions overall, the BAU is anticipated to be 100082 tCO₂e by 2030, an increase from 90454 tCO₂e/yr calculated at the baseline year of 2021. Please note that the projected annual increase in GHG emissions is a theoretical calculation based on an annual population growth rate of 1.13%.

TABLE 2 COMMUNITY GHG EMISSIONS & ENERGY CONSUMPTION TABLE

Community Greenhouse Gas Emissions (tCO₂e) by Sector

Energy Sector	Emissions (tonnes)		Energy (GJ)	
Commercial & Institutional	14463.42	16%	585377	26%
Solid Waste	3618	4%	0	0%
Manufacturing Industries & Construction	10381.96	11%	504206	23%
Residential	14919.27	16%	423058	19%
On-Road Transportation	47071.32	52%	710671	32%
Wastewater & Sewage	0.83	0.0009%	0	0%
Total	90454.8		2223312	

Next Steps – Milestone 2

Milestone 2 of the PCP program involves establishing the GHG emission targets for the Climate Action Plan. An emission reduction target specifies the number of emissions the municipality aims to reduce. The GHG emission reduction target is achieved by implementing the measures outlined in the Climate Action Plan, which forms Milestone 3. Milestone 2 establishes the corporate and community emission reduction targets based on the BAU forecast determined in Milestone 1.

PCP reduction targets have three components – they are expressed as a percentage reduction relative to a baseline year (2021), to be achieved by a target year (2030). In accordance with PCP, the target year is recommended to be ten years from the baseline year. For example, Council can adopt a reduction target to reduce its corporate GHG emissions by 10% below 2021 levels by 2030. In this hypothetical scenario, the Town's corporate GHG emissions were 450,000 tonnes in 2021 (the baseline year), and the target would be to reduce emissions to 405,000 tonnes by 2030.

Staff are currently exploring options for creating a menu of tasks related to reducing GHG emissions in each energy sector. A survey was drafted as part of a series of public engagement opportunities to facilitate the establishment of the Town's emission reduction targets. Through their advisory role, the CPWG will assist in developing the Climate Action Plan. With the Milestone 2 survey, the CWPG will provide their expertise and technical advice to ensure sufficient public engagement opportunities for Smiths Falls residents and advise on a suggested emission reduction targets for Council.

At this time, Staff are preparing the survey's rollout. Once the emission reduction target recommendations are determined, Council will be asked to formally adopt the targets, which would then inform the development of the Climate Action Plan. The Climate Action Plan will outline a roadmap of initiatives and strategies to achieve these targets.

This report marks the fulfillment of Milestone 1 of the Milestone Framework and the initiation of Milestone 2. Moreover, it acknowledges the Town's commitment to combating the climate crisis by participating in the PCP Milestone Framework. All values and methodologies presented here align with PCP's standard practice.

Budget/Financial Implications: None at this time; however, future updates on the Milestone Framework will have budget implications as they relate to the completion of Milestones 2 and 3,

Existing Policy: N/A

Consultations: Climate Protection Working Group, Manager of Development Services, Lanark County- Department of Public Works, Greenscale Inc, Enbridge Gas, Hydro One, Kalibrate and Clean Air Partnership

Attachments

Appendix A – *Corporate Emissions Inventory Summary Table Business-as-Usual Forecast and Methodology.*

Notes/Action (space for Council Member's notes):

Respectfully Submitted:

Original copy signed

Richard Grant, Planner I

Reviewed by:

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Karl Grenke, RPP,
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Paul McMunn, CET

Appendix 'A'- Corporate Emissions Inventory Summary Table, Business-as-Usual Forecast and Methodology

2021 Corporate GHG Emissions (tCO2e) by Sector

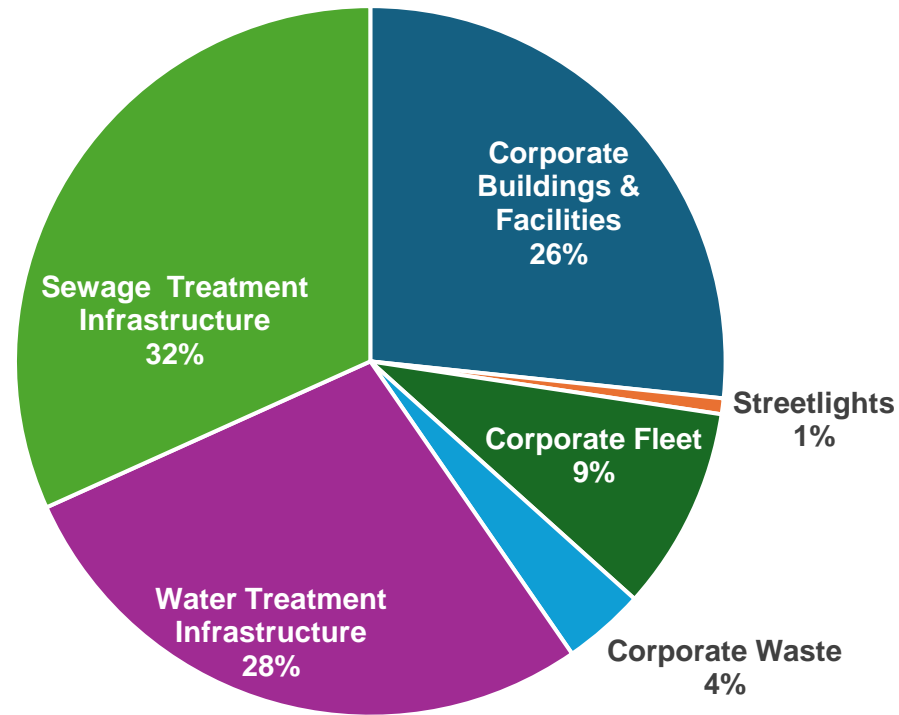


FIGURE 1 2021 CORPORATE GHG EMISSIONS BY SECTOR

Corporate Greenhouse Gas Emissions (tCO2e) by Sector, 2021

Sector	Emissions (tCO2e)	Energy (GJ)
Corporate Buildings & Facilities	455.32	13022
Streetlights	12.25	1550
Corporate Fleet	158.35	2392
Corporate Waste	63.7	N/A
Water Treatment Infrastructure	476	14768
Sewage Treatment Infrastructure	542	17771

2021 Corporate Energy Consumption (GJ) by Sector

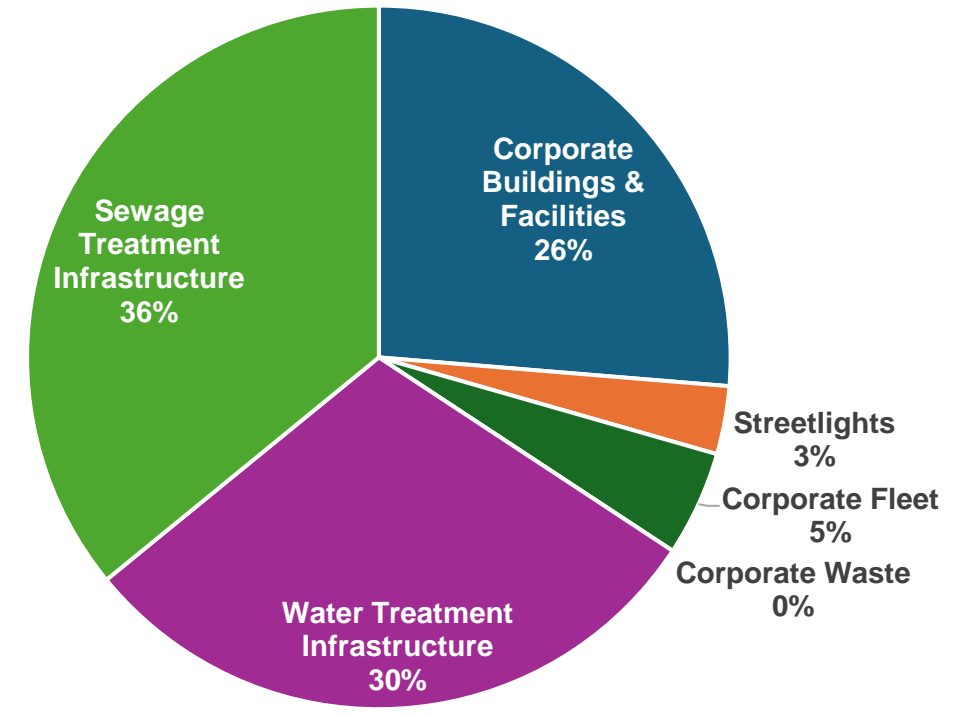


FIGURE 2 2021 CORPORATE ENERGY CONSUMPTION (GJ) BY SECTOR

Note: Corporate Solid Waste consumption data is waste collected at Town-owned buildings and facilities. The Corporate Energy Consumption dataset does not include a “Corporate Solid Waste” component because solid waste does not produce energy.

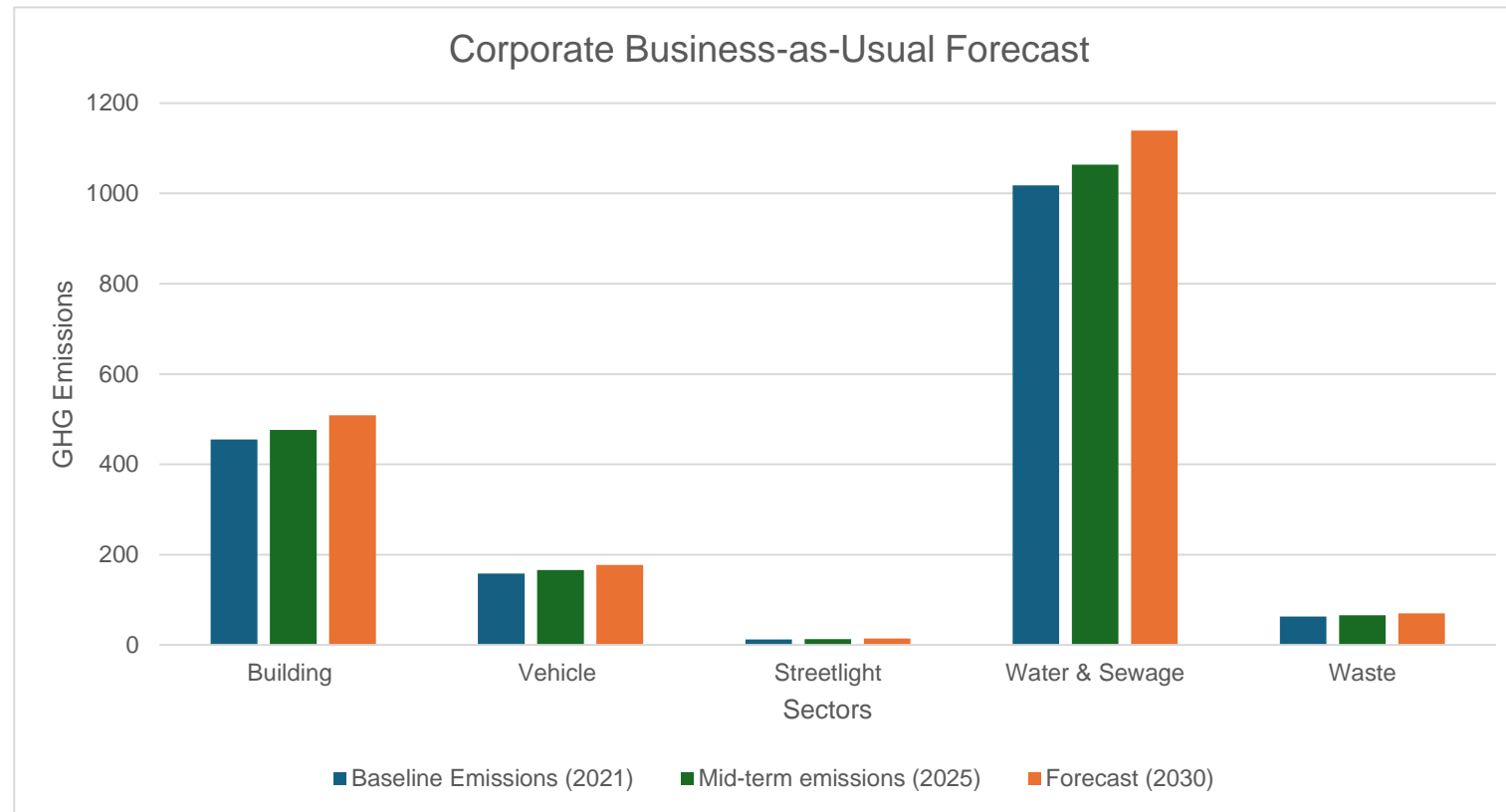


FIGURE 3 CORPORATE BUSINESS-AS-USUAL FORECAST

SECTOR	BASELINE EMISSIONS (2021)	MID-TERM EMISSIONS (2025)	FORECAST (2030)
BUILDING	455	476	509
VEHICLE	158	166	177
STREETLIGHT	12	13	14
WATER & SEWAGE	1018	1064	1139
WASTE	63	66	70
TOTAL	1706	1785	1909

Corporate GHG Emissions Inventory Assessment Methodology Table

Emission Source	Inclusion Protocol	Exclusion Protocol	Data Source	Notes
Buildings & Facilities	Report all direct and indirect energy emissions generated at corporate buildings and facilities. Include all buildings and facilities owned and/or operated by the local government, including those leased to a person or other legal entity	Exclude energy consumed by water and wastewater infrastructure (e.g. lift stations, treatment plants, etc.); emissions generated by these facilities are accounted for in the water and wastewater sector.	2021 Hydro One consumption data 2021 Enbridge consumption data	Electricity and natural gas consumption for all corporate-owned buildings is captured in 2021 Hydro One and Enbridge consumption data.
Fleet	Report all direct and indirect emissions generated using motor fuels (including electricity) in corporate vehicles and equipment. Include all on- and off-road vehicles owned and/or operated by the local government, including all corporate-owned public transit (i.e. local rail and bus systems).	In certain instances, it may not be possible to distinguish electricity consumed in vehicles and equipment from electricity consumed by a building or facility. In these cases, indirect emissions from electricity consumed by vehicles may be reported in the corporate buildings sector.	2021 Esso Fuels sales data	The 2021 Esso fuels sales data capture all fuel consumption for the corporate-owned fleet. The "Buildings & Other Facilities" dataset captures consumption data for electrified vehicles.
Streetlighting	Report all indirect emissions generated from the use of electricity for outdoor lighting. Consider all outdoor lighting (e.g. streetlights, traffic signals, park lighting, etc.) owned and/or operated by the local government, including lighting systems that are leased to a private management company or utility	GHG emissions from streetlights owned and operated by a regional or neighbouring municipality may be excluded from the corporate GHG inventory.	2021 Hydro One consumption data	All energy consumption data for streetlights are captured in Hydro One data.
Water and Wastewater	Report all direct and indirect emissions associated with municipal water and wastewater infrastructure energy use. Include all infrastructure owned and/or operated by the local government, including infrastructure that is leased to a utility or private management company	GHG emissions from infrastructure owned and operated by a regional authority or neighbouring municipality may be excluded from the corporate GHG inventory.	2021 Hydro One consumption data 2021 Enbridge consumption data	All consumption data for water and wastewater use is collected in the 2021 Hydro One and Enbridge consumption data.
Solid Waste	Report the total downstream emissions associated with the landfilling or incineration of waste generated by the Town during the inventory year. Includes waste generated at all corporate-owned buildings and facilities as well as parks and public receptacles		GIM Data for all corporate waste collection	All the consumption data is collected from GIM

Appendix 'B'- Community Emissions Inventory Summary table, Business-as-Usual Forecast and Methodology

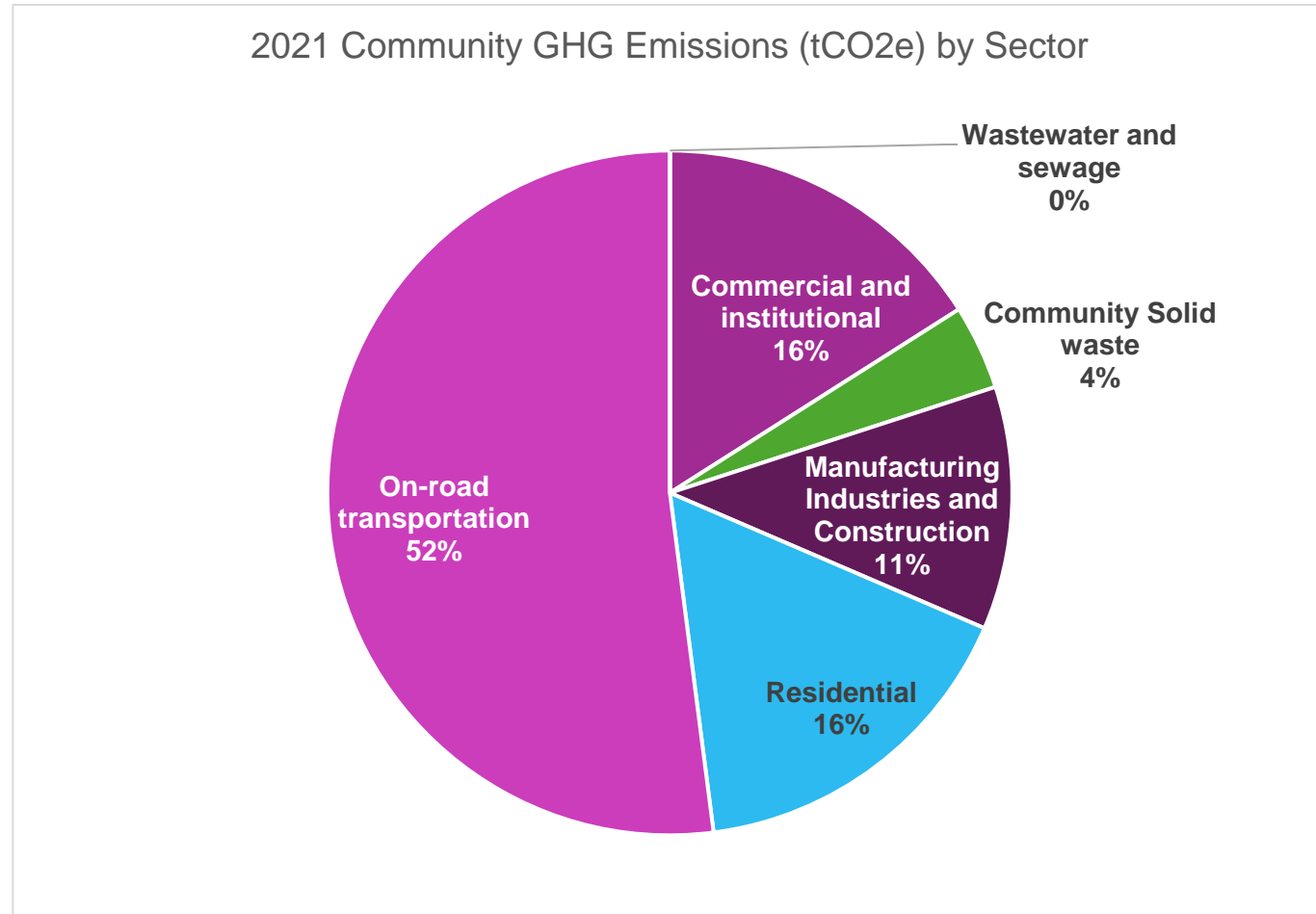


FIGURE 4 2021 COMMUNITY GHG EMISSIONS BY SECTOR

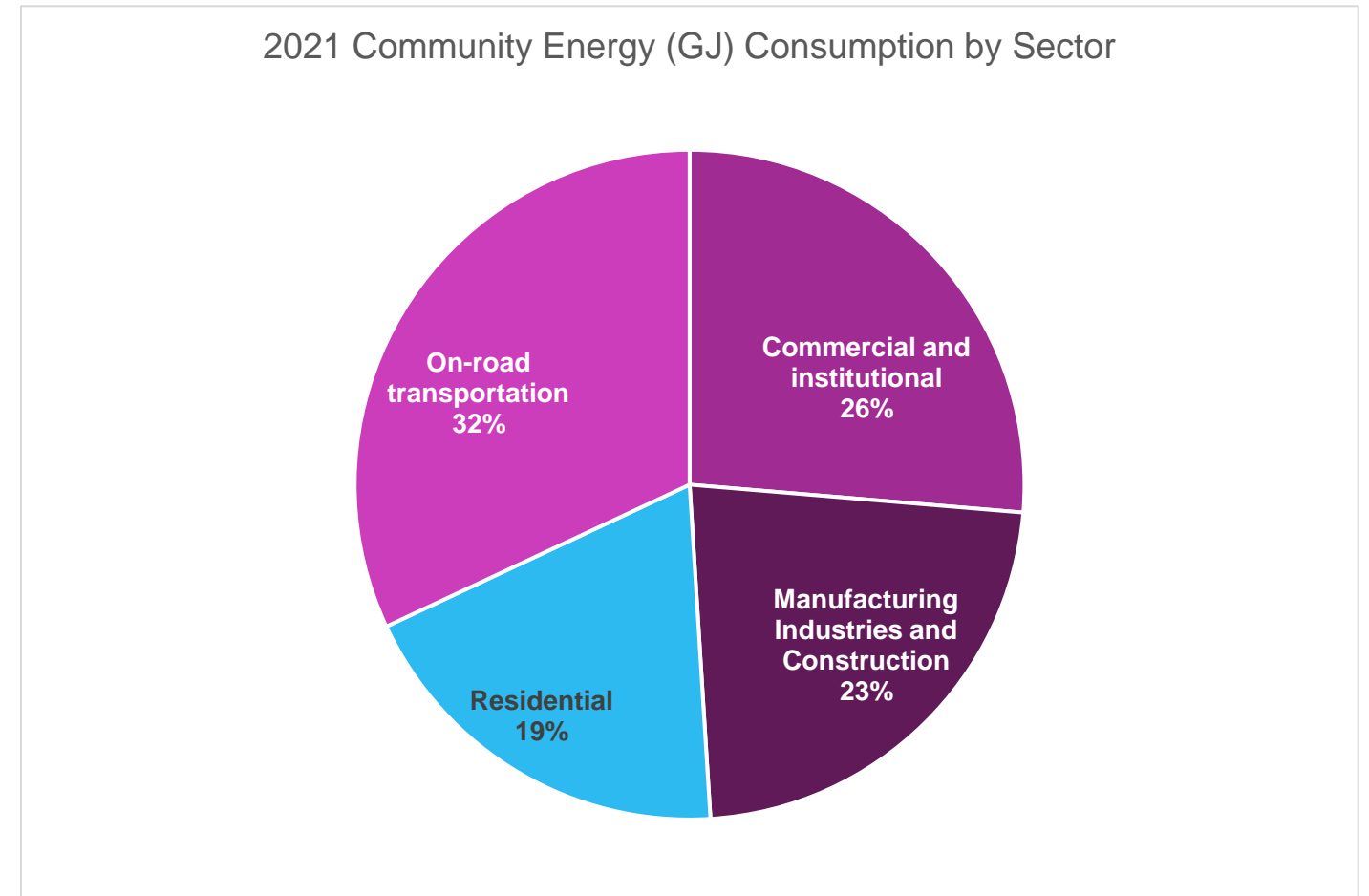


FIGURE 5 2021 COMMUNITY ENERGY CONSUMPTION BY SECTOR

Community Greenhouse gas emissions (tCO ₂ e) by sector, 2021		
Energy Sector	Emissions (tonnes)	Energy (GJ)
Commercial & Institutional	14463.42	585377
Solid Waste	3618	N/A
Manufacturing Industries & Construction	10381.96	504206
Residential	14919.27	423058
On-Road Transportation	47071.32	710671
Wastewater & Sewage	0.83	N/A

Note: The Wastewater and Sewage energy sector measures 0.83 tCO₂e, which equates to less than 0.00092% of total emissions; hence, the value of 0% is presented in the chart above.

However, it should be noted that the 0% value represents the non-energy-related emissions determined using the Population-based method to estimate GHG emissions. In this case, non-energy-related emissions are the fugitive emissions from the wastewater treatment process.

All energy-related emissions for the wastewater treatment plant are included in the Corporate GHG Inventory Dataset.

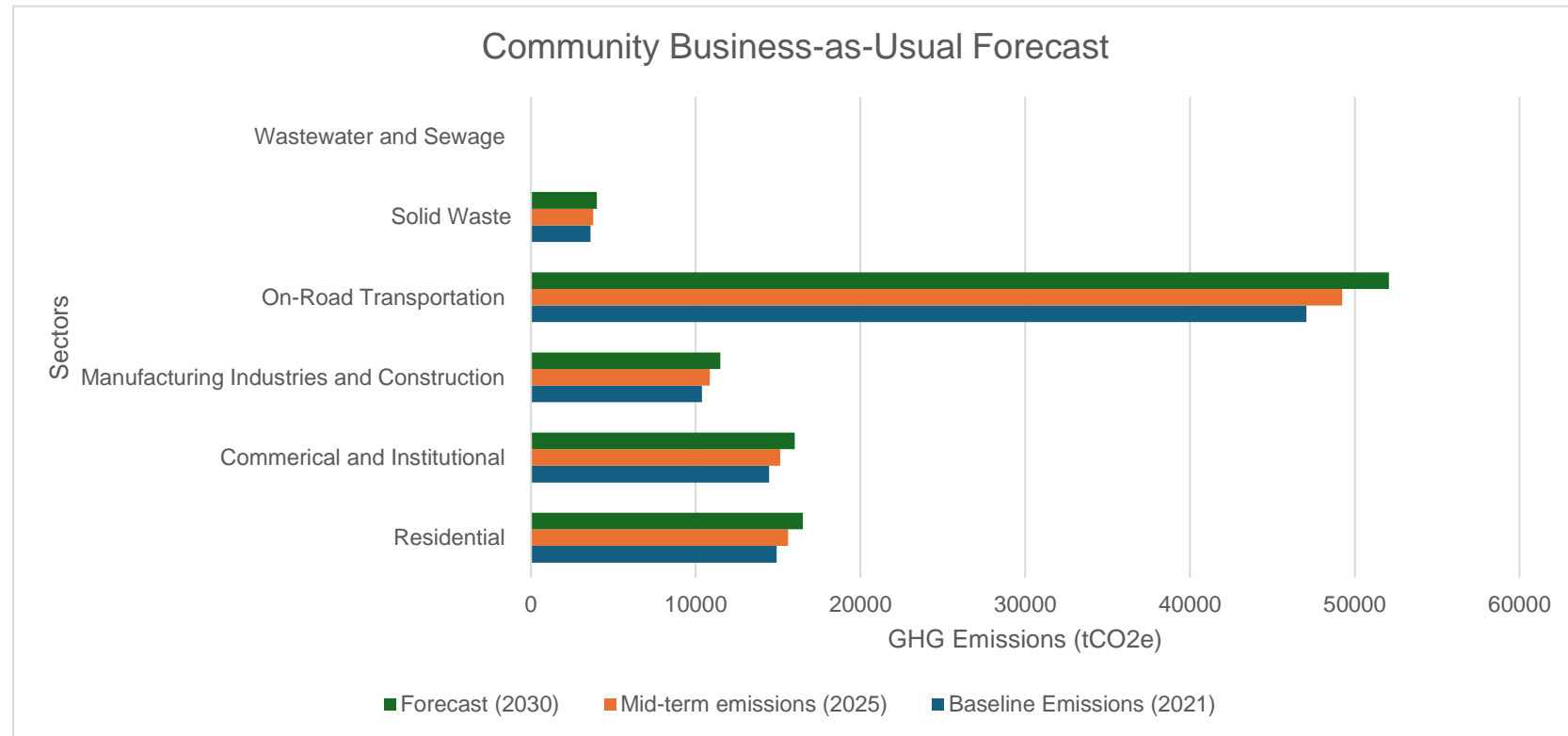


FIGURE 6 COMMUNITY BUSINESS-AS-USUAL FORECAST

Note: Because the Wastewater and Sewage value for the BAU in Figure 6 is less than 1%, its representative value appears on the graph as 0.

SECTOR	BASELINE EMISSIONS (2021)	MID-TERM EMISSIONS (2025)	FORECAST (2030)
RESIDENTIAL	14919	15605	16507
COMMERCIAL AND INSTITUTIONAL	14463	15128	16003
MANUFACTURING INDUSTRIES AND CONSTRUCTION	10382	10859	11487
ON-ROAD TRANSPORTATION	47071	49235	52081
SOLID WASTE	3618	3784	4003
WASTEWATER AND SEWAGE	1	1	1
TOTALS	90454	94612	100082

Community GHG Emissions Inventory Assessment Methodology Table

Sectors and subsectors	Inclusion Protocol	Exclusion Protocol	Data Source	Notes
Stationary Energy				
Residential buildings	Report all direct and indirect emissions from energy use at community buildings (residential dwellings, institutions, commercial establishments, industrial facilities, etc.).	Carbon dioxide (CO2) emissions associated with the combustion of biomass and biomass-based energy sources (e.g. wood, wood residuals, pellets, etc.) are of biogenic origin and may be excluded from the GHG inventory.	2021 Hydro One (Electricity) and Enbridge (Natural Gas) Consumption Data	Energy generated from other fuel types is excluded. Difficulty in using disaggregating electricity and natural gas data from commercial and industrial buildings. Energy subsectors not included: Energy industries; energy generation supplied to the grid; Agriculture, forestry, and fishing activities; non-specified sources; fugitive emissions from mining, processing, storage, and transportation of coal; and Fugitive emissions from oil and natural gas.
Commercial and institutional buildings and facilities			2021 Hydro One (Electricity) and Enbridge (Natural Gas) Consumption Data	
Manufacturing industries and construction			2021 Hydro One (Electricity) and Enbridge (Natural Gas) Consumption Data	
Transportation				
On-road	Report all direct and indirect emissions from motor fuels (including electricity) in on-road vehicles and public transit systems. On-road vehicles are designed for transporting people, property, or material on paved roads (e.g. cars, vans, trucks, motorcycles, etc.).	In certain instances, it may be impossible to distinguish electricity consumed in vehicles from that consumed by a building or facility. In these cases, indirect emissions from electricity consumed by vehicles may be reported in the appropriate building sector.	2021 Fuel sales data from Kalibrate	Only aggregated fuel sales from gasoline and diesel for six operating outlets. Energy subsectors not included: railways, waterborne navigation, aviation, and off-road transportation.
Waste				
Disposal of solid waste generated in the city	Report all downstream emissions generated from all solid waste disposed of outside the community during the inventory year.		2021 GIM Collection Data	It also contains the I.C.I. sectors.
Biological treatment of waste generated in the city				
Incineration and open burning of waste generated in the city				
Wastewater generated in Town			2021 Stats Canada Smiths Falls Population Data	Uses Population-based method in PCP Milestone Tool. Only measures the non-energy related emissions generated from the wastewater treatment facility in Town
Industrial Processes and Product Use (IPPU)				
Industrial Processes	If combustion emissions from fuels are obtained directly or indirectly from the feedstock, those emissions shall be allocated to IPPU.	If fuel sales are combusted for energy use, the emissions from fuel use shall be counted under <i>stationary energy</i> . The emissions shall be reported under <i>stationary energy</i> if the derived fuel is transferred from combustion in another source category.		
Product use				
Agriculture, forestry, and other land use (AFOLU)				
Livestock				
Land				
Aggregate sources and non-CO2 emission sources on land				
Other Scope 3				
Other Scope 3				

