

REPORT TO COUNTY COUNCIL

2025 Annual Energy Report

To: Warden and Members of County Council

From: Director of Public Works

RECOMMENDATION

1. That County Council receive Report PW 2026-14 entitled “2025 Annual Energy Report” as information.

REPORT HIGHLIGHTS

- The purpose of this report is to summarize the County’s 2025 renewable energy (RE) generation results and provide an overview of annual energy consumption and greenhouse gas (GHG) emissions by County-owned facilities and fleet assets in 2025.
- The County’s annual RE generation has increased by approximately 192% since 2015 baseline levels, with 5.35 million kilowatt hours (ekWh) of RE produced in 2025 from various solar, biogas and geothermal applications - reaching 8.9% of the County’s total energy needs compared to the 2025 target of 11.7%.
- County facilities consumed just under 50.9 million ekWh of energy in 2025, costing approximately \$5.4 million. Despite total energy consumption by facilities increasing 9.8% since 2015 due to expanded provisions of municipal services, the actual energy use intensity (EUI) for buildings/minor assets and water/wastewater treatment plants has reduced by 16.8% and 2.7%, respectively.
- The County’s fleet and equipment consumed approximately 9.3 million ekWh of energy in 2025, which equates to \$1.12 million in fuel purchases of unleaded gasoline, diesel, compressed natural gas (CNG) and electricity. Approximately 34% of the County’s in-service fleet (60 out of 179 units) have been converted to alternative fuels as of the end of 2025 to reduce fossil fuel consumption and GHG emissions.
- County facilities and fleet produced 6,473 tonnes of carbon dioxide equivalent (tCO₂e) in GHG emissions in 2025, which is 4.0% higher than 2015. Factoring in service growth, the actual GHG intensity for facilities and fleet decreased by about 14.5% and 9.8%, respectively.

IMPLEMENTATION POINTS

As required by O. Reg. 25/23 of the *Electricity Act*, 1998, S.O. 1998, c. 15, Sched. A, the 2025 energy consumption data and GHG emissions will be reported through the Broader Public Sector reporting portal by July 1, 2026.

Financial Impact

There are no financial impacts as a result of this report. Any required actions that will result in expenditures have been accounted for in the 2026 Business Plan and Budget based on the County's *2024 Energy Management Plan*, *2022-2032 Renewable Energy Action Plan* and the *2025 Fleet Management Plan*.

Communications

Upon Council approval, this Council report will be circulated to Area Municipalities, Smart Energy Oxford, the County's staff Energy Team and Extended Leadership Team as information outlining the progress of Oxford County's corporate organization relating to the goals of the *100% RE Plan*.

As all municipalities are required under *O. Reg. 25/23: Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans*, the County communicates energy performance to the Ministry of Energy, via annual energy consumption and GHG emissions reporting. This is completed annually, as well as through the County's *2024 Energy Management Plan* (EMP), updated in 2024.

Annual energy updates are posted to the Oxford County website at www.oxfordcounty.ca/en/your-government/reports-and-publications.aspx, with highlights shared on social media. In addition, the County will further communicate 2025 performance highlights of key Public Works systems, including energy initiatives, to the public through an annual social media campaign during National Public Works Week (May 17–23, 2026).

2023-2026 STRATEGIC PLAN

Oxford County Council approved the *2023-2026 Strategic Plan* on September 13, 2023. The Plan outlines 39 goals across three strategic pillars that advance Council's vision of "Working together for a healthy, vibrant, and sustainable future." These pillars are: (1) *Promoting community vitality*, (2) *Enhancing environmental sustainability*, and (3) *Fostering progressive government*.

The recommendation in this report supports the following Strategic Plan pillars and goals:

Strategic Plan Pillars and Goals

		
Promoting community vitality	Enhancing environmental sustainability	Fostering progressive government
Goal 1.2 – Sustainable infrastructure and development	Goal 2.1 – Climate change mitigation and adaptation	Goal 3.1 – Continuous improvement and results-driven solution

See: [Oxford County 2023-2026 Strategic Plan](#)

DISCUSSION

Background

On June 24, 2015, Oxford County Council unanimously passed the 100% RE goal by 2050. This was followed up when County Council adopted the [100% RE Plan](#) on June 27, 2018, which lays out a strategic approach to achieving the goal of 100% RE by 2050. This initiative seeks to reduce energy consumption, while at the same time increasing RE generation to achieve net-zero performance across the geographical County by the year 2050.

The 100% RE Plan is based on a community-wide initiative. The County as an organization is a major contributor to the potential achievement of the 100% RE Plan by addressing the energy consumption and generation potential of the County’s facility and fleet portfolio, striving to be a leader within the community and demonstrating active support for this important community goal.

As shown in Figure 1 below, the 100% RE Plan has a number of contributor groups, including individual residents, organization groups, businesses residing in the community and governments, which include the area municipalities, as well as the County organization.

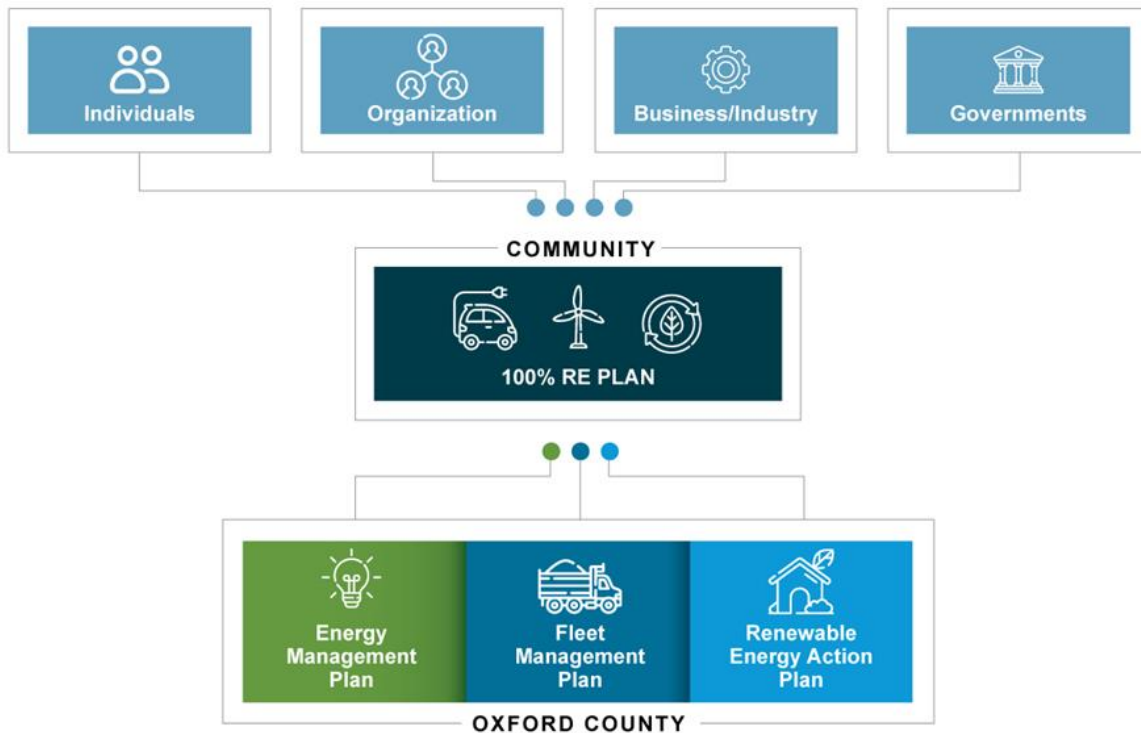


Figure 1 – 100% RE Plan Contributors

Over the last number of years, Oxford County has set organizational goals to help advance the progress of the 2050 100% RE community goal. Of note, the County has developed and implemented various plans to drive efforts of energy conservation and RE generation (or harvesting) as follows:

- **2024 Energy Management Plan** – On July 10, 2024, County Council approved Report [PW 2024-25](#), which outlined the County’s updated [Energy Management Plan](#) (EMP-2024) for 2024 through to the end of 2028. EMP-2024 is the third iteration of the County’s EMP, with the first being enacted in 2014. As required by provincial regulation O. Reg. 25/23, this EMP is required to be updated every five years, with the next update due by July 2029. The focus of this plan is on energy conservation and GHG emission reductions.
- **2025 Fleet Management Plan** – On November 12, 2025, County Council adopted Report [PW 2025-60](#), which outlined the County’s [Fleet Management Plan](#) (FMP-2025) transitioning from the former *2021 Green Fleet Plan*. This revised plan took a more expansive view of how the County manages all aspects of its fleet to provide additional transparency through financially and environmentally responsible procurement, operations, maintenance, regulatory compliance, and asset management. The FMP-2025 continues to place focus on energy efficiency and environmental sustainability within the fleet portfolio.

- 2022-2032 Renewable Energy Action Plan** – On August 10, 2022, County Council approved Report [PW 2022-37](#), which outlined the County’s ten-year [Renewable Energy Action Plan](#) (REAP) for 2022 through to 2032. The REAP will expand upon the County’s existing renewable energy systems through a proposed multi-year capital implementation plan comprised of an additional solar PV system, geothermal / air source heat pump, heat recovery and wood pellet boiler technology applications. The focus of this plan is on RE generation (harvesting), as well as energy conversion to reduce GHG emissions.

Management of energy and GHG emissions plays an integral role in reducing GHG emissions and energy consumption, improving energy efficiency, establishing financial stability and increasing RE harvesting. Management includes planning, implementing, verifying and reporting. For this reason, the County organization has established and adopted the EMP, FMP, and REAP, each of which plays a role in identifying where the County may reduce energy dependence and resulting GHG emissions in support of the community's 100% RE Plan. These plans provide a roadmap, along with actionable items required to meet the targets. Refer to Table 1 below for a summary of how the County organization is progressing with respect to targets as identified in the 100% RE Plan.

Table 1 – 100% RE Plan Energy and GHG Target Status*

Description	Current 2025	Intermediate Target 2025	Final Target 2050
Total energy reduction from 2015	-8.9%	10.5%	54%
Total GHG emissions reduction from 2015	-4.0%	11%	47%
Total Renewable Energy mix	8.9%	11.7%	80.3%

* Note: The initial targets approved by Council did not speak to changes related to servicing community growth.

Comments

Oxford County, as an organization, owns, operates and maintains various assets that affect energy consumption and GHG emissions as well as RE utilization (also referred to as harvesting).

To differentiate where energy is consumed, how GHG’s are emitted, and where RE is utilized, these assets have been broken down into three main service areas, including Facilities, RE Utilization and Fleet. To come up with cumulative energy consumption, various energy types are quantified into a single metric by converting to equivalent kilowatt hours (ekWh) which assists in comparing year-to-year metrics across all commodities (i.e. electricity, natural gas, gasoline, diesel, etc.).

A summary of the County’s energy metrics is outlined in Attachment 1.

Facilities

The County operates 285 individual buildings across 261 facility sites that consume energy such as electricity, natural gas or propane. These assets have been organized by operation type to line up in general with *O. Reg. 25/23 Broader Public Sector* reporting requirements and are comprised of 93 facility building locations (i.e. non-process assets including administrative offices, housing, patrol yards, libraries, etc.), 98 plant locations (i.e. treatment plants and pumping stations) and 70 minor asset locations (i.e. street lighting, COIN Towers and stand-alone public Electric Vehicle Chargers).

In 2025, these assets had a total purchased energy consumption of just under 46 million ekWh, which included 29.1 million kWh of electricity, 1.59 million m³ of natural gas, 73,017 litres of propane and 5,400 litres of diesel. The total utility cost of this purchased energy was \$5.4 million, with \$4.78 million related to electrical and \$660,000 in natural gas (including propane).

For asset comparison purposes, these values can be represented as an Energy Use Intensity (EUI), either ekWh per square meter (SM) (non-process assets), or as ekWh per megalitre (ML) of fluid moved (plant process assets). The comparison of net-energy usage intensity per SM and per ML of each individual operation type is summarized in Table 2 below. The RE consumed by buildings and plants are broken out and included as a separate line to show the RE contribution towards total energy consumption requirements. In 2025, the gross consumption of energy by County facilities was the equivalent of 50.8 million ekWh, which is a 9.8% increase from 2015 consumption levels of 46.3 million ekWh.

Table 2 – 2025 Facilities Consumption by Operation Type

Operation Type	Area (SM)	Flow (ML)	Energy (ekWh)	EUI (ekWh/SM)	EUI (ekWh/ML)
Woodingford Lodge (LTC)	15,664	-	8,552,996	546	-
Human Services (Multi-Unit Housing)	31,323	-	6,859,559	219	-
Public Works (Admin, libraries, EMS stations, childcare, etc.)	21,330	-	4,617,019	216	-
Human Services (Single Family Townhouses)	13,008	-	2,262,108	174	-
Public Works (Patrol Yard Facilities)	8,735	-	1,241,879	142	-
Public Works (Waste Facilities)	7,167	-	272,439	38	-
Buildings RE Consumption	-	-	964,975	10	-
Public Works (Street/Traffic Lighting)	-	-	229,552	-	-
Public Works (COIN Towers/EV chargers)	-	-	66,853	-	-

Operation Type	Area (SM)	Flow (ML)	Energy (ekWh)	EUI (ekWh/SM)	EUI (ekWh/ML)
Public Works (Wastewater Plants)	13,317	16,711	13,651,827	-	817
Public Works (Water Plants)	5,846	12,036	8,218,313	-	683
Plant RE Consumption	-	-	3,910,787	-	136
TOTAL	116,390	28,747	50,848,307	-	-

While overall energy consumption (from both renewable and non-renewable sources) has risen substantially over the 2015 baseline, the EUI for both SM (non-process building / minor assets) and ML of flow (plant process – water and wastewater treatment plant assets) has reduced significantly as shown in Table 3, resulting in noteworthy energy consumption avoidance while supporting a growing community. These improvements in EUI are a result of energy conservation, optimization initiatives and process changes implemented by the County since 2015. Based on 2015 energy intensities and using updated variables, the 2025 energy consumption would have been projected to be 53.6 million ekWh (increase of 15.7% over 2015 actuals) had no energy conservation measures been in place.

Another factor of influence includes weather temperatures. In 2025, heating degree days (HDDs) were 5% less than the 2015 baseline, but 18% greater when compared to 2024, while cooling degree days (CDDs) were 64% greater than 2015 and 1.7% greater than 2024. Over the past decade, on average this region’s HDDs outpace CDDs by a factor of 7.7, meaning the 2025 combined weighted heating and cooling degree days actually matched the 2015 actuals but increased by 15.8% when compared to 2024. Due to the complexity of applying this variable across the various facilities, weather factors have not been included in the baseline adjustments shown in this report. As this can act as a large variable in yearly consumption data, staff will further explore ways to concisely incorporate this information into future year reporting baselines. A further illustration of actual energy consumption, as well as avoidance based on the 2015 EUI baseline, is shown in Figure 2.

Table 3: Facilities Energy Intensity Overview

Service Area	2015 EUI	2025 EUI	Reduction
Buildings/Minor Assets	310 ekWh/SM	258 ekWh/SM	16.8%
Plants	922 ekWh/ML	897 ekWh/ML	2.7%

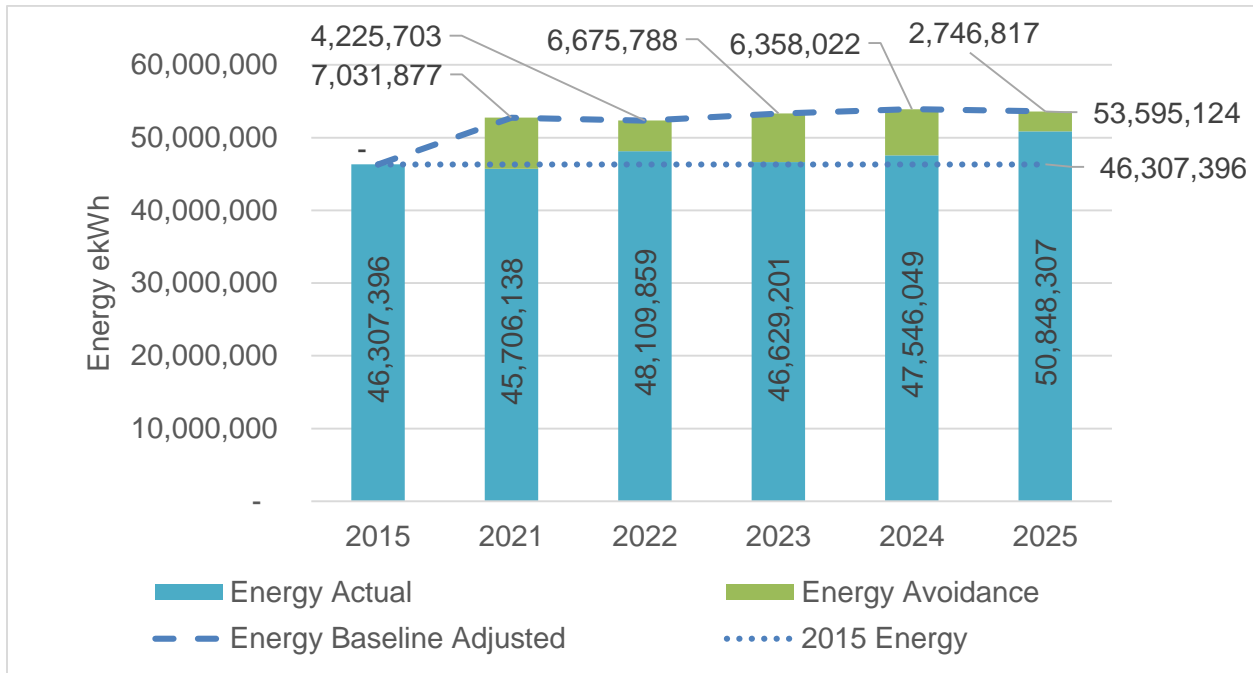


Figure 2 – Facilities Energy Consumption and Avoidance Trending (2015 to 2025)

Renewable Energy Utilization

The County’s RE assets are divided into sub-categories based on technology type including biogas boiler, geothermal (ground source and air source), solar PV (feed-in tariff and net-metered) and solar thermal and may expand in the future as new technologies emerge or are implemented (i.e. biomass, air source heat pump, etc.), as per the *REAP*.

These existing assets are summarized in Table 4 below, showing the overall portfolio production for 2025. To assist Council and the public in understanding the financial implications of the RE harvesting, the associated financial benefit has also been included in the table for each system type. Financial benefits from these systems can either come from direct revenue, such as FIT solar contracts with IESO, or through cost avoidance using direct harvesting through County-owned systems, such as solar net-metering, biogas use, geothermal, etc. In total, for 2025, the harvested RE resulted in approximately \$454,300 in operational savings, or a cost avoidance equating to 8.4% of the 2025 utility budget.

The majority of the energy that is harvested across the County’s RE portfolio is utilized by County assets directly on the site where the system is located, with a smaller percentage of systems (i.e. FIT/micro-FIT systems) fully exporting RE back to the electrical grid generating revenue. In 2025, 4.88 million ekWh were consumed on site, while 478,000 ekWh were exported back to the electrical grid. Overall, all RE produced is considered an offset to the total energy consumption needs of the County.

Table 4: County RE System Performance

RE Harvesting Technology	Asset Count	Utilization Actuals 2025 (ekWh)	Revenue or Avoided Cost	RE Annual Revenue (or Avoided Cost)
Solar PV (Feed-in-Tariff)	12	370,000	Revenue	\$138,600
Solar PV (Net-Metered)	11	1,680,000	Avoided Cost	215,900
Biogas (Ingersoll and Woodstock WWTPs)	2	3,146,000	Avoided Cost	95,000
Geothermal (Social Housing - 111 Brock St.)	1	138,000	Avoided Cost	4,200
Solar Thermal (Social Housing - 742 Pavey St.)	1	20,000	Avoided Cost	600
TOTAL	27	5,354,000		\$454,300

Since 2015, total annual RE harvesting has gone from 1,843,000 ekWh to 5,354,000 ekWh, representing an increase of 192% (refer to Figure 3). This total RE harvested by the County would be enough to supply the annual energy needs for 110 typical family homes in southwestern Ontario. In 2025, the amount of RE harvested as a percentage of the total energy consumption (considered the RE mix from generation) was 8.9%. This results in a slight decrease over 2024 due to an increase in energy demand combined with a slight decrease in biogas utilization, as well as more than normal snow cover in November and December impacting Solar PV generation; however, is maintaining progress towards the 2025 target of 11.7% in the 100% RE Plan.

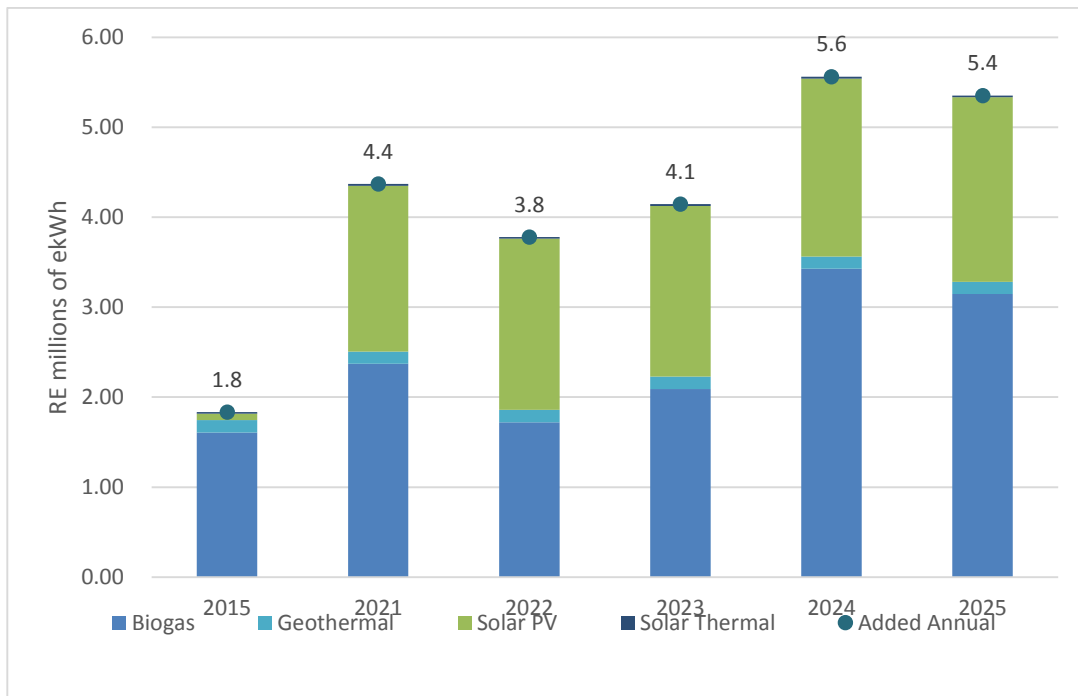


Figure 3 – Annual RE Harvesting Trending (2015 to 2025)

It is important to note that the RE industry is rapidly changing, and in order to achieve some of the identified future targets of the 100% RE Plan, regulatory restrictions related to Virtual Net-Metering and other constraints will need to continue to be advocated for in order to expand potential deployment capacity. County staff will continue to look for opportunities to provide feedback and influence regulatory decision-making.

Fleet

The County’s fleet travelled approximately 3.0 million kms in 2025, down about 36,000 kms from 2024. These assets can be organized into the following sub-categories:

- Commercial (light-duty vehicles, cars, SUVs, etc.)
- Industrial (heavy vehicles, including plows, leachate trucks, vacuum trucks, tractors, etc.)
- Paramedical (ambulances, first response units, etc.)
- Equipment (all unlicensed, off-road vehicles including compactors, forklifts, etc.)

Fleet assets are powered by a variety of fuels, including gasoline, diesel, CNG and battery electric. In 2025, fleet fuel costs across all fuel types were a combined \$1.12 million. Overall fleet energy usage increased in 2025 by 8.7% over 2024, which was primarily driven by a 45% increase in fuel energy consumption within the industrial fleet. While the total number of fleet assets in operation did not change, there was a significant increase in industrial fleet activities related to winter road operations from the previous year. In 2025, there was 105 winter road events which is an increase of 64% over 2024, which had 64 events. While total fleet kilometers travelled decreased slightly in 2025, the increased winter operations resulted in the

consumption of more diesel fuel and CNG producing higher GHG emissions. The previous five years averaged 63 winter road events per year, so 2025 operations was a significant increase having a negative impact on the fleet energy metrics. Table 5 summarizes the fleet assets, kilometres driven, fuel equivalent consumption and fuel efficiency.

Table 5: 2025 Fleet Asset Utilization Overview

Fuel Type	Fleet Type	Asset Count	Travel Distance (km)	Fuel* (eL unleaded)	Efficiency (eL/100 km)
Fuel Unleaded (Includes HEV)	Commercial	60	1,285,590	179,743	14.0
	Paramedical	26	830,735	137,701	16.6
	Equipment	2	228	231	101.2
Subtotal (L)		88	2,116,553	317,675	15.0
Fuel Diesel	Commercial	2	33,906	8,094	23.9
	Industrial	24	454,851	286,226	62.9
	Paramedical	-	-	-	-
	Equipment	31	11,995	224,192	1,869.0
Subtotal (L)		57	500,752	518,512	102.7
Fuel CNG (kg)	Industrial	4	95,906	91,003	94.9
Dual Fuel - Unleaded / CNG (eL)	Commercial	11	184,306	30,407	16.5
Fuel Propane (L)	Equipment	3	170	249	146.5
Fuel Electric	Commercial	12	126,240	6,268	5.0
	Equipment	3	73	11	14.5
Subtotal (kWh)		15	126,313	6,279	5.0
Dual Fuel - Unleaded / Electric (eL)	Commercial	1	9,022	86	1.0
TOTAL		179	3,033,023	964,212	31.8

* Note: Fuel consumption has been converted to equivalent gasoline (eL unleaded or eL) for all fuel types to demonstrate a common “apples to apples” comparison. Using this comparison, the eL is actually more than actual volumes consumed due to conversions (i.e. a litre of diesel has a higher energy content than a litre of unleaded gasoline so when expressed as eL the volume is greater).

As of the end of 2025, 33.5% of the County’s fleet (60 out of 179 units) have been converted to alternative fuels to reduce GHG emissions. This represents a small percentage increase from 2024 due to an increase in Electric Fleet assets combined with a decrease in Dual Fuel – Unleaded/CNG fleet. With current market conditions, the existing County fleet can attain a maximum of 42% alternate fuel deployment (76 out of 179 units). By the end of 2026, it is

projected that 35% of the County’s fleet (63 of 180) will have been converted to alternative fuels. Through fuel diversification, there is also an added benefit of mitigating commodity volatility cost impacts during times of fuel market challenges impacted by external geopolitical events.

Greenhouse Gas Reductions

Reducing the County’s overall GHG emissions has been a consistent consideration for ongoing initiatives, including the REAP and FMP. As the County continues to grow as an organization to support a growing community (i.e. a larger staff complement equating to more space, a larger fleet, etc.), the overarching goal of reducing emissions remains. However, it should be noted that the growth of the organization may translate to an emissions avoidance and is not always a clear reduction simply based on the number of buildings, size of the fleet, etc.

In 2025, the County emitted the equivalent of 6,473 tCO₂e in GHGs (4,229 tCO₂e Facilities and 2,244 tCO₂e Fleet), which is a 4.0% increase from 2015 emissions of 6,223 tCO₂e (3,984 tCO₂e Facilities and 2,239 tCO₂e Fleet). The 100% RE Plan includes a GHG emissions reduction target of 11% by 2025, which works out to a 1.1% year over year GHG reduction from 2015 or target of 5,607 tCO₂e in GHGs for the County in 2025.

Despite this increase, the GHG intensity (GHG per SM, per ML and per km driven) has reduced substantially more compared to the 2015 baseline (refer to Table 6), resulting in significant GHG emissions avoidance while supporting a growing community. Based on 2015 GHG emissions intensities and using updated variables, GHG emissions would have been projected to be 7,203 tCO₂e (increase of 15.8% over the 2015 adjusted baseline) had no energy conservation measures been in place. A further illustration of actual GHG emissions, as well as avoidance based on the 2015 emission intensity baseline and 100% RE Plan GHG emissions reduction target is shown in Figure 4.

Table 6: GHG Emissions Intensity Overview

Sector	2015 GHGI	2025 GHGI	Reduction
Facility GHG/SM	0.037 tCO ₂ e	0.031 tCO ₂ e	16.2%
Facility GHG/ML	0.048 tCO ₂ e	0.043 tCO ₂ e	10.4%
Fleet GHG/100 KM	0.082 tCO ₂ e	0.074 tCO ₂ e	9.8%

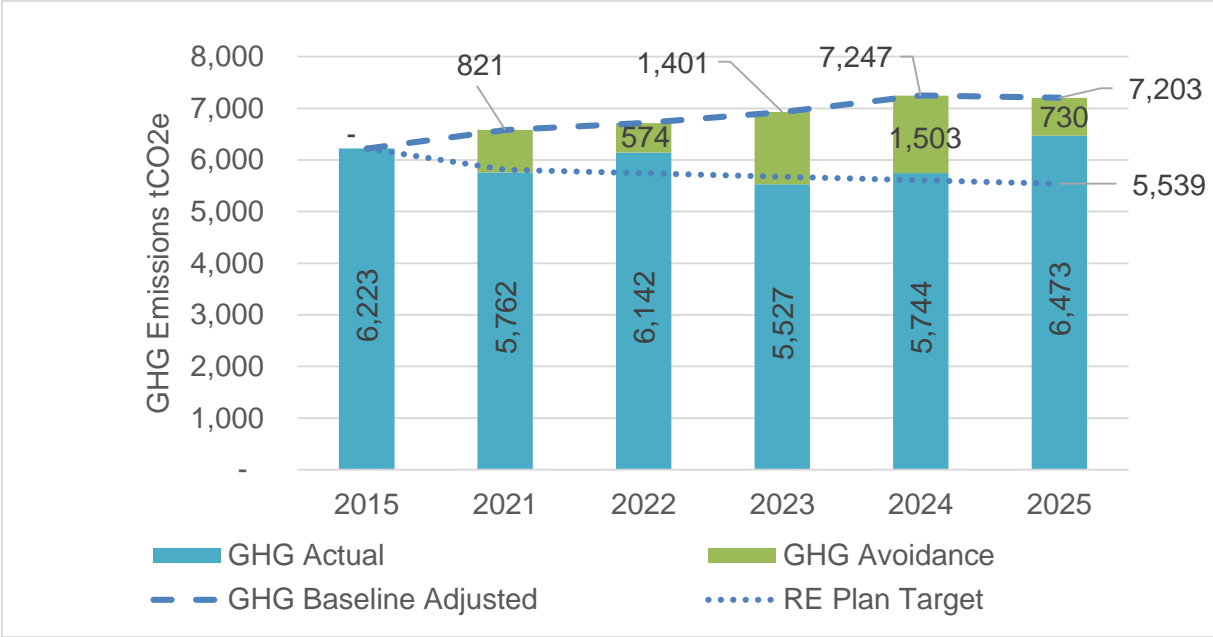


Figure 4 – GHG Emissions and Avoidance Trending (2015 to 2025)

In 2025, the top energy fuel source utilized by County assets was electricity, which makes up over 52% of all energy consumption, but only equates to 17% of all GHG emissions. The top fuel source contributing to GHG emissions is natural gas/CNG, at just under 50% of all GHG emissions, but makes up just over 30% of all energy consumption. The fuel source with the highest GHG intensity was diesel, making up 9% of energy consumption but contributing 20% of all GHG emissions. Refer to Figure 5 below for a comparison of energy consumption versus GHG emissions by fuel source type.

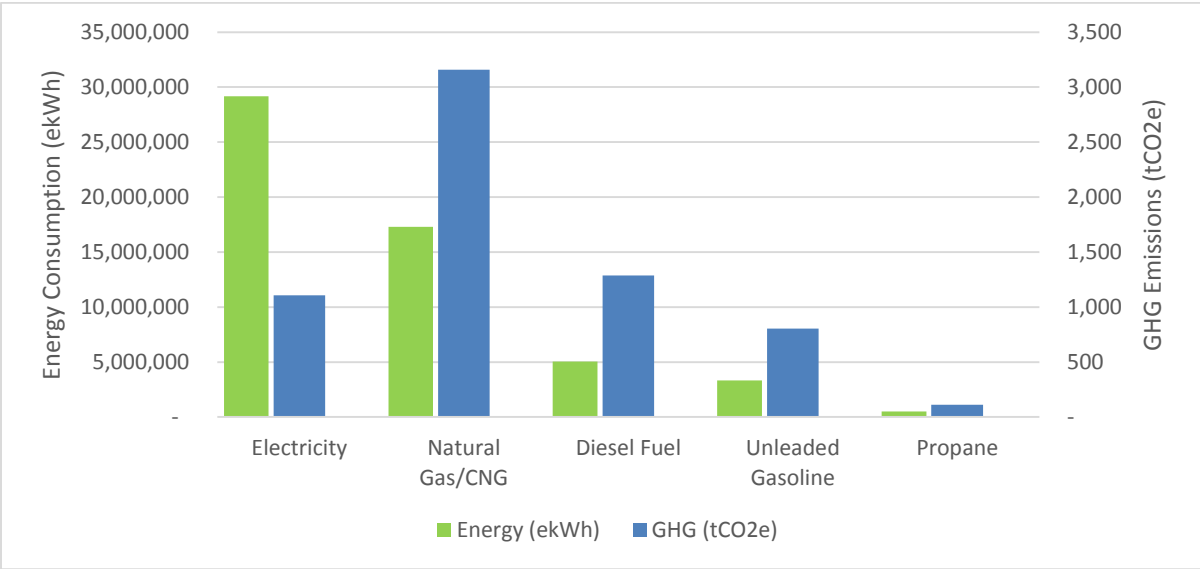


Figure 5 – 2025 Energy Fuel Source Type and GHG Emissions

To provide further clarity, Table 7 below outlines the GHG emissions per 1 million ekWh consumption for each fuel type. These numbers help to illustrate the importance of the REAP and FMP initiatives to implement alternative fuel sources where appropriate, as well as the EMP for overall conservation and energy demand reduction. The Government of Canada’s latest GHG emissions factor for Ontario’s electricity that was used for 2025 rose by 26.7%, which has negatively impacted the County’s emissions reduction from the previous year. The increase in the amount of GHG produced by the Ontario electricity grid is a result of additional gas plant generation for peak demand and nuclear plant downtime. IESO forecasts show the GHG intensity of the Ontario electricity grid slightly increasing in the near term in an effort to meet consumption demand, but decreasing over time as more sustainable projects are approved to meet long term energy needs (i.e. wind, nuclear, etc.). Where possible, the County will continue to monitor for appropriate advocacy opportunities for a cleaner provincial electricity grid to positively impact the County’s GHG performance through electrification.

Table 7: GHG Emission Rates

Energy Type	GHG/1 million ekWh (tCO₂e)
Diesel Fuel	254.8
Unleaded Gasoline	241.6
Propane	219.2
Natural Gas/CNG	182.6
Electricity	38.0

2025 Plan Updates

In 2025, the County completed several initiatives identified in the EMP-2024, FMP-2025 and REAP-2022.

Under EMP-2024, which includes carry forward initiatives from EMP-2019, the County conducted a Demand Control Ventilation project at WFL Woodstock, targeting an estimated reduction of 172,000 ekWh per year, with verification and commissioning planned in 2026. LED lighting retrofits were implemented at fourteen Multi-Unit Residential Building (MURB) sites, contributing an additional 120,000 kWh per year in energy savings. Sub-metering installations were completed at four facilities including the Woodstock WWTP at 195 Admiral, WFL Woodstock, WFL Ingersoll and WFL Tillsonburg, with the potential to reduce energy consumption through identification of energy in-efficiencies. Energy assessments were finalized at five locations, including the Thamesford and Tavistock WWTPs, as well as MURB site locations at 816 Alice Street in Woodstock and 174 and 215 Lisgar Ave in Tillsonburg. These assessments will work to inform improvement work to be included in the next EMP iteration. Work also progressed on the Green Initiatives MURB 2025 projects at 82 Finkle Street in Woodstock and 70 Maria Street in Tavistock, with design, tendering, award and construction

activities underway with completion targeted for later in 2026. In addition, the Oxford County Energy Team was formally established to support ongoing energy management efforts across the organization.

In 2025, Council approved the County's FMP which continues a focus on green fleet initiatives as well as overall best management practices of the County's fleet assets. In the past year, three battery electric vehicles and 2 hybrid electric vehicles were added to the County's fleet through planned asset renewals, further improving both life cycle cost and environmental performance. In addition, fleet asset reviews were completed on an as needed basis to identify and implement efficiencies. An example of this was the conversion of Unit 684 from a heavy-duty crane truck to a crane trailer as outlined in [Report PW 2025-06](#).

Through the REAP-2022, the County completed several renewable energy projects. Solar PV systems at 135 Carroll Street and 364 Athlone Avenue were completed and put into service, resulting in an estimated 278,000 kWh per year in new generation, or a 14.4% increase to the solar portfolio moving forward. The Thornton Wellfield Solar PV project progressed through design, tendering and award, with a targeted completion date later in 2026 and estimated generation of 906,000 kWh per year. The Woodstock WWTP Biogas Utilization project reached major milestones with completion of design and submission to the Ministry of Environment Conservation and Parks (MECP) for the Renewable Energy Approval (REA) application, targeting tender and contract award in 2026, and completion early in 2027 at a targeted net energy savings of 2.4 million ekWh per year.

Both the Thornton Solar and Woodstock WWTP Biogas Utilization project have faced regulatory delays resulting in these projects not coming online as quickly as initially anticipated. Design, planning approvals and completing the necessary steps for the Environmental Activity and Sector Registry (EASR) related to the Thornton Solar project took most of 2025 with the project being tendered at the end of the year. Similarly for the Woodstock WWTP Biogas Utilization project, the REA process has taken much longer than originally anticipated due to factors including various design challenges and scope development, as well as the ongoing consultation process and MECP review requirements, resulting in delays to the original target completion date outlined in the REAP. Staff are hopeful that as these projects clear these regulatory hurdles, implementation will proceed in a smoother manner; however, depending on the project type, bringing generation online can be dependant on final activities completed by the local utility company. This can add some additional time outside the project team's control, as has been the case with some of the recently completed solar projects at 135 Carroll Street, 364 Athlone Avenue, and the soon to be completed Thamesford WWTP which should be online in the first half of 2026.

Staff continue to monitor all Plans, explore new emerging technologies and best practices, with the intention that projects may be added or removed through the annual budget process based on economic circumstances. Staff will continue to evaluate and propose implementation recommendations for Council's consideration to further the County's strategic goals.

Furthermore, it has been noted in the past that established performance targets related to energy conservation, GHG emissions and RE energy mix did not sufficiently account for community growth, and subsequent County organizational growth, to provide the necessary services. The 100% RE Plan was based on a population projection of 133,907 by 2050. This

projection has already been exceeded and is not reflective of current estimates which show a potential population of 202,400 by 2051, and further growth to 233,600 by 2061 as outlined in [Report CP 2026-08](#). Through this latest growth forecast, staff recognize the need to revisit the goals outlined in the 100% RE Plan based on recent growth compared to the established 2015 baseline, and that a review will be brought forward as a project in the Climate Action Plan.

CONCLUSIONS

The 2025 Annual Energy Report demonstrates Public Works' continued administration of the County's comprehensive energy portfolio to effectively manage operational costs while striving to contribute to the 100% RE goal.

Through future years' budgets, the County organization will continue to work to reduce energy consumption and GHG emissions further in the coming years through planned ongoing implementation of the EMP, the REAP and the FMP.

SIGNATURES

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ATTACHMENT

Attachment 1 – Overview of 2025 Corporate Energy Consumption