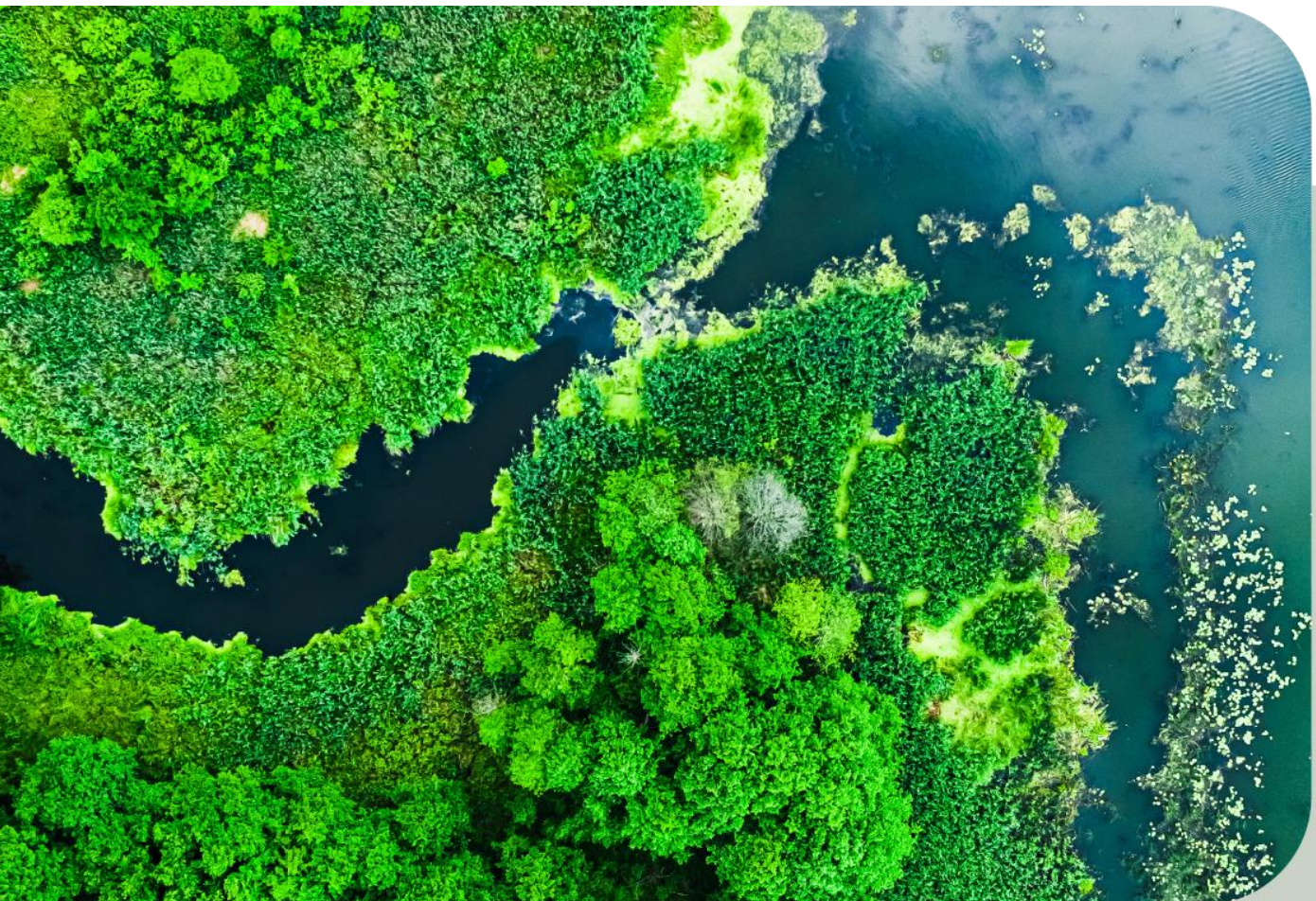


Corporate Emissions Report (2024/2025)

Welwyn Hatfield Council

14 October 2025, version 1.2



1 Document Control

Paper copies are valid only on the day they are printed. Contact the author if you are in any doubt about the accuracy of this document.

1.1 Revision History

Date	Version	Description	Author
14/10/2025	1.2	Minor Amendments	Ben Fisher
11/09/2025	1.1	Minor Amendments	Ben Fisher
31/07/2025	1.0	Final Report	Ben Fisher
28/07/2025	0.1	Initial Report	Ben Fisher

1.2 Contact Information

	Client	TEAM
Organisation	Welwyn Hatfield Council	TEAM (Energy Auditing Agency Ltd.)
Address	Accounts Payable Team, Council Offices, East Campus, Welwyn Garden City AL8 6AE	Energy Services Department, 3 Radian Court, Knowlhill, Milton Keynes MK5 8PJ
Telephone	01707 357269	01908 950020
Email	k.murphy2@welhat.gov.uk	bfisher@teamenergy.com
Key Contacts	Kelly Murphy	Ben Fisher

1.3 Quality Control

	Name	Role	Date
Prepared by:	Ben Fisher	Energy Services Analyst	11/09/2025
Proofread by:	Sam Arje	Senior Energy Consultant	11/09/2025
Checked by:	Tom McLeish	Energy Consultant	09/09/2025

DISCLAIMER

Whilst reasonable steps have been taken to ensure that the information contained within this report are correct, you should be aware that the information contained within it may be incomplete, inaccurate or may have become out of date. Accordingly, TEAM (Energy Auditing Agency Ltd.) makes no warranties or representations of any kind as to the content of this report or its accuracy and, to the maximum extent permitted by law, accept no liability whatsoever for the same including, without limit, for direct, indirect, or consequential loss, business interruption, loss of profits, production, contracts, goodwill, or anticipated savings. Any person making use of this report does so at their own risk [and it is recommended that they seek professional advice from their own adviser whenever appropriate].

Estimates of costs and savings are based on site observations, published case studies, technical references, and professional experience. They should be regarded with caution, and recommendations are subject to detailed feasibility studies. Nothing in this report is intended to be or should be interpreted as an endorsement of, or recommendation for, any supplier, service, or product.

Table of Contents

1	Document Control	2
1.1	Revision History	2
1.2	Contact Information	2
1.3	Quality Control	2
2	Executive Summary	4
3	Corporate Emissions Report Scope.....	5
4	Methodology	6
5	Results.....	7
6	Appendix.....	12
6.1	Backing Data.....	12



2 Executive Summary

Local Authorities are required to monitor annual energy consumption and other sources of greenhouse gas emissions. Welwyn Hatfield Council (WHC) reports Scope 1, 2, and limited Scope 3 carbon emissions equivalent (CO₂e), using a period matching its financial year (1st April – 31st March). This report documents the 2024 - 2025 financial year's emissions performance.

Emissions have been calculated using activity data from multiple sources and applying appropriate emissions conversion factors published by the Department of Energy Security and Net Zero (DESNZ).

Total emissions, recorded in tonnes of Carbon Dioxide equivalent (CO₂e), are displayed in Table 1 below. Emissions have decreased by 153 tonnes of CO₂e this financial year compared to the previous. This is also reflected in the normalising factor comparisons, with lower emissions per each intensity metric. There has been a 21% reduction in total emissions since the baseline year (2019 - 20 financial year).

	19/20	20/21	21/22	22/23	23/24	24/25
Total Emissions (tCO₂e)	2,507	2,000	1,405	2,072	2,126	1,973
Emissions per Household (tCO ₂ e/house)	0.0578	0.0461	0.0304	0.0450	0.0443	0.0403
Emissions per Turnover (tCO ₂ e/£m)	17.9	14.3	10.2	13.6	16.3	14.7
Emissions per FTE (tCO ₂ e/ FTE)	-	-	4.04	5.84	5.81	4.75

Table 1 Welwyn Hatfield Council annual emissions and intensity measures

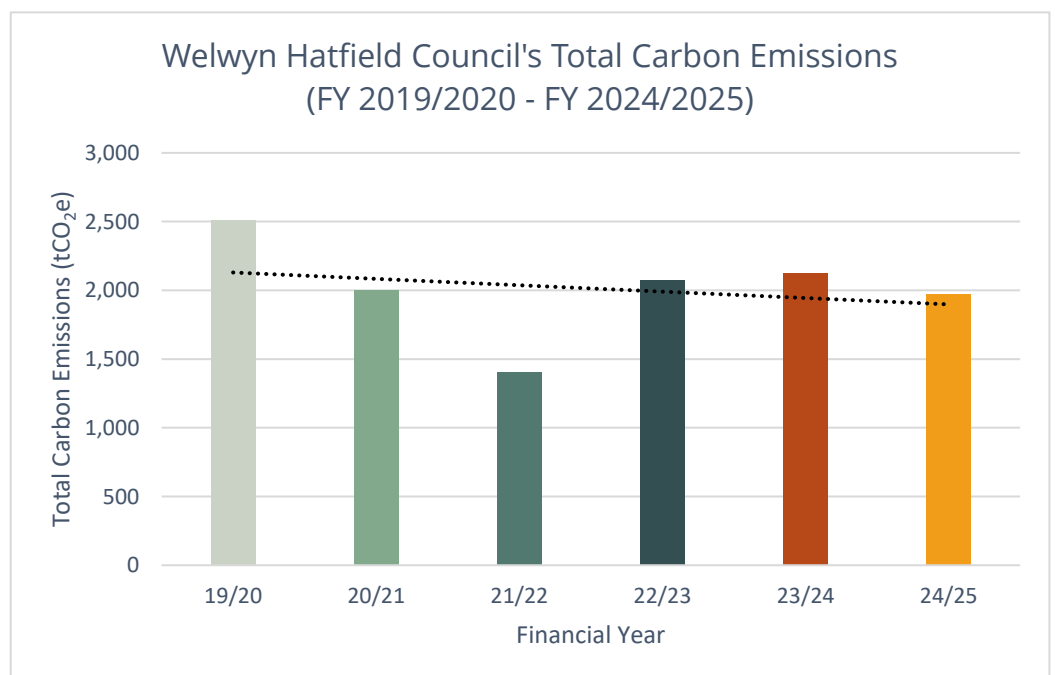


Figure 1 Welwyn Hatfield Council's Corporate Emissions FY 2019/2020 - FY 2024/25

3 Corporate Emissions Report Scope

This emissions report will cover elements of the following emission categories:

- Scope 1 – All Direct Emissions from the activities of Welwyn Hatfield Council or under their control. Including fuel combustion on site such as gas boilers, fleet vehicles and air-conditioning leaks.
- Scope 2 – Indirect Emissions from electricity purchased and used by Welwyn Hatfield Council. Also included are the generation or consumption of heat or steam. Emissions are created during the production of the energy and eventually used by Welwyn Hatfield Council.
- Scope 3 – Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities not covered in Scope 2, outsourced activities, waste disposal, etc.

Scope 1:

- WHC Managed Natural Gas
- Company-Owned Vehicles

Scope 2:

- WHC Managed Electricity

Scope 3:

- Non-WHC Managed Electricity (Leisure, Estates Rented Properties, Outsourced Activities)
- Non-WHC Managed Natural Gas (Leisure, Estates Rented Properties, Outsourced Activities)
- Purchased Goods: Paper Usage
- Business Travel: Non-Company Owned Vehicles
- Business Travel: Public Transport – Taxi, Train and Tube Travel
- Transmission and Distribution (WHC Managed Electricity)

4 Methodology

TEAM were able to source data covering 01/04/2024 – 31/03/2025 from:

- Billed energy consumption data obtained from the TEAM Sigma platform
- Company mileage data provided by Kelly Murphy of Welwyn Hatfield Council
- Employee's mileage and expense data provided by Kelly Murphy of Welwyn Hatfield Council
- Amount of paper purchased throughout the 01/04/2024 – 31/03/2025 period provided by Kelly Murphy of Welwyn Hatfield Council
- Intensity metric figures provided by Kelly Murphy of Welwyn Hatfield Council

Using the most relevant conversion factors provided by DESNZ, which can be found in the 'Conversion factors 2024 (Full set advanced users)' document, TEAM were able to convert the usable data into Tonnes of Carbon Dioxide equivalent (tonnes of CO₂e).

5 Results

TEAM have identified that between 01/04/2024 – 31/03/2025, Welwyn Hatfield Council emitted 1,973 tonnes of CO₂e.

01/04/2024 – 31/03/2025	Scope 1	Scope 2	Scope 3	Total
Tonnes of CO ₂ e	608	710	655	1,973
Percentage of total emissions	31%	36%	33%	100%

Table 2 Summary of results for the reporting year

In the previous reporting period, Welwyn Hatfield Council emitted 2,126 tonnes of CO₂e.

01/04/2023 – 31/03/2024	Scope 1	Scope 2	Scope 3	Total
Tonnes of CO ₂ e	737	826	563	2,126
Percentage of total emissions	35%	39%	26%	100%

Table 3 Summary of results for the previous year

This shows that Welwyn Hatfield Council decreased their emissions by 153 tonnes of CO₂e between this reporting year and the previous reporting year.

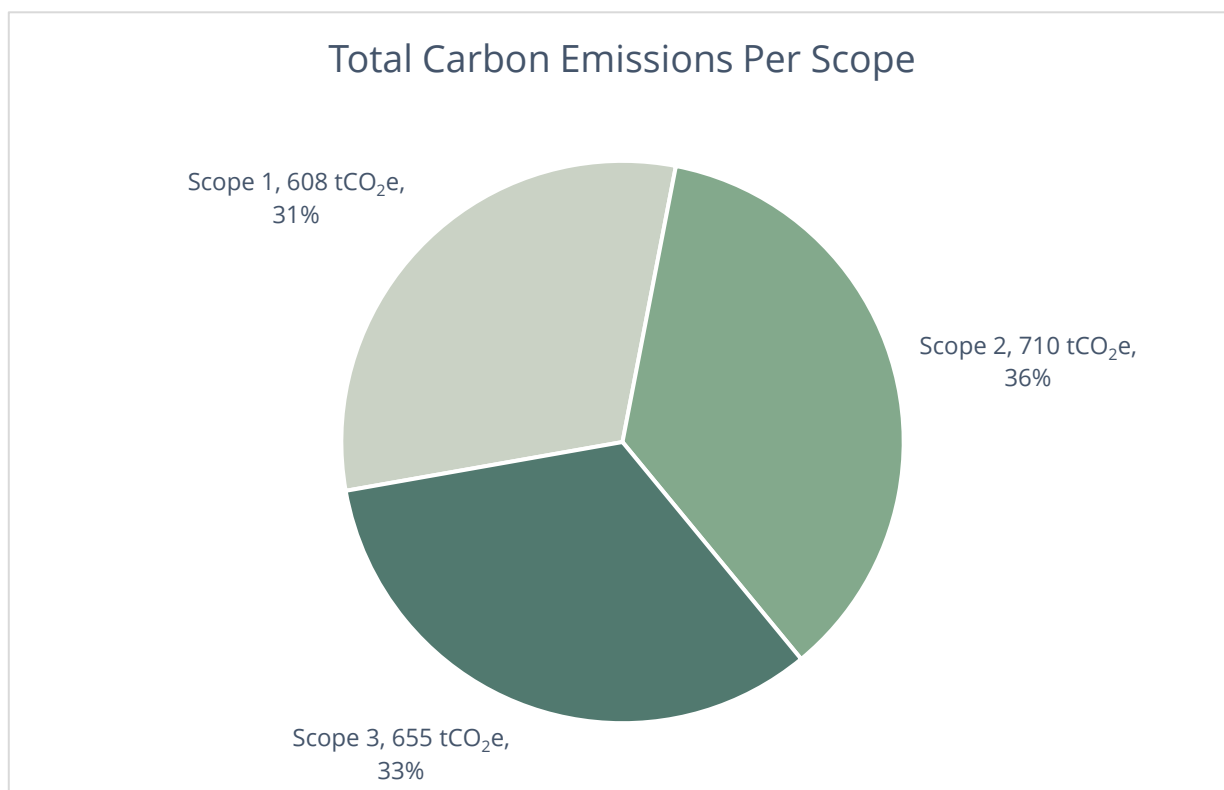


Figure 2 Carbon emissions split per scope (FY 2024/2025)

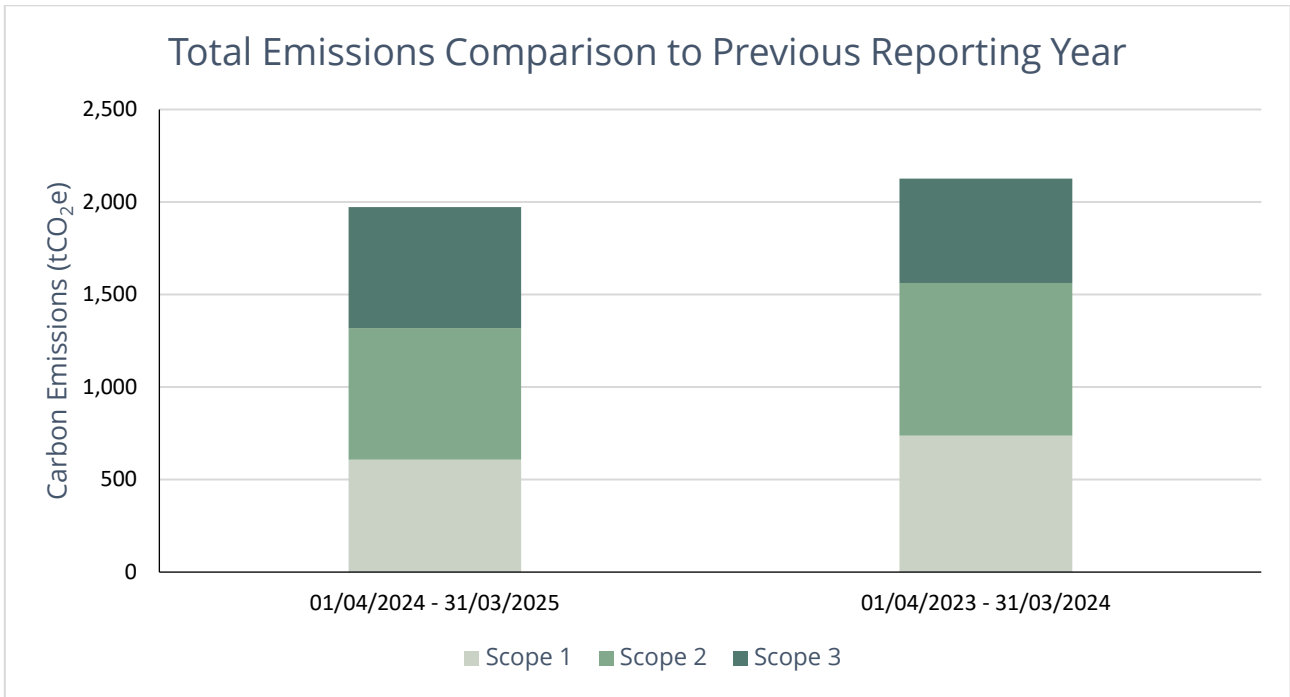


Figure 3 Carbon emissions split by scope comparing FY 2024/2025 to FY 2023/2024

Previous Year Comparison (tCO ₂ e)			
Scope	Previous Year	Current Year	Difference
Scope 1	737	608.1	-128.9
Scope 2	826	710.2	-115.8
Scope 3	563	654.7	91.7
Total	2,126	1,973.0	-153

Table 4 Total carbon emissions comparison comparing FY 2023/2024 to FY 2024/2025

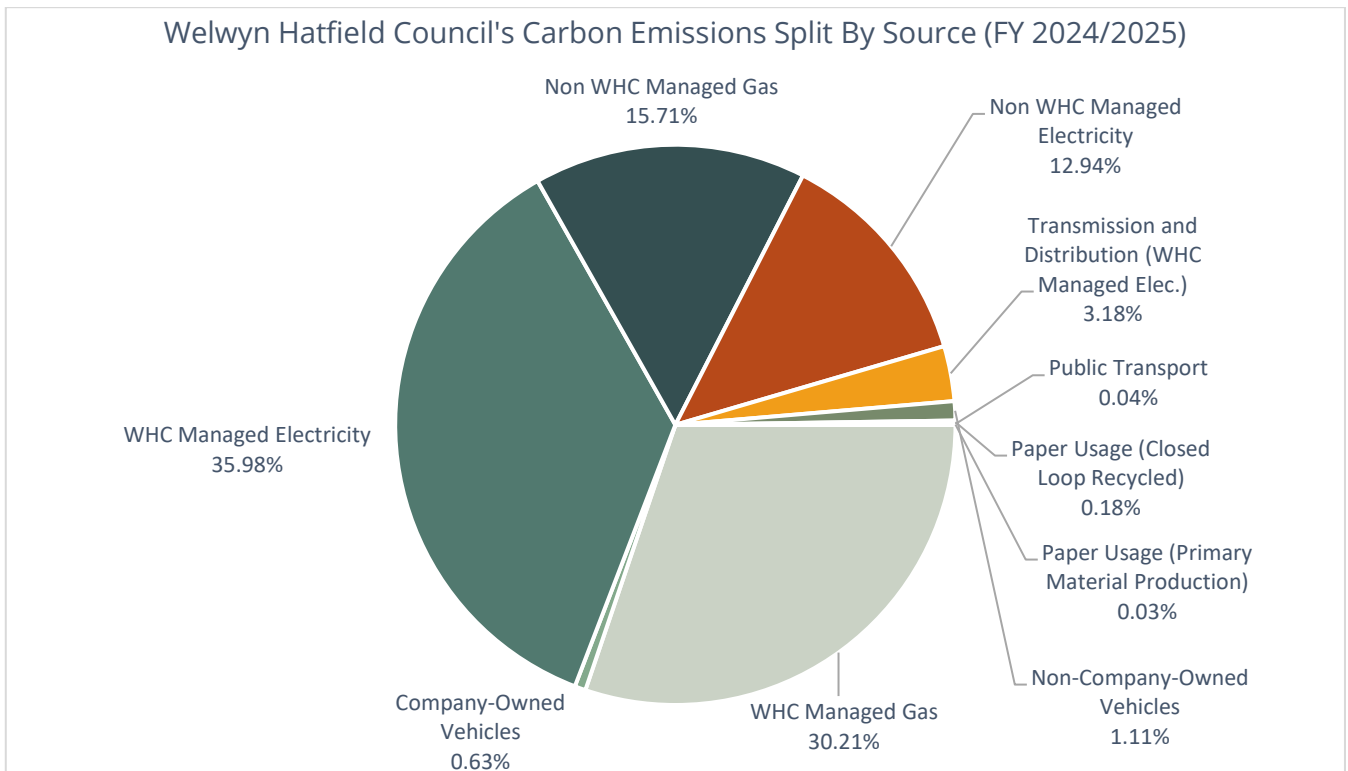


Figure 4 Welwyn Hatfield Council's Carbon Emissions Split by Source (FY 2024/25)

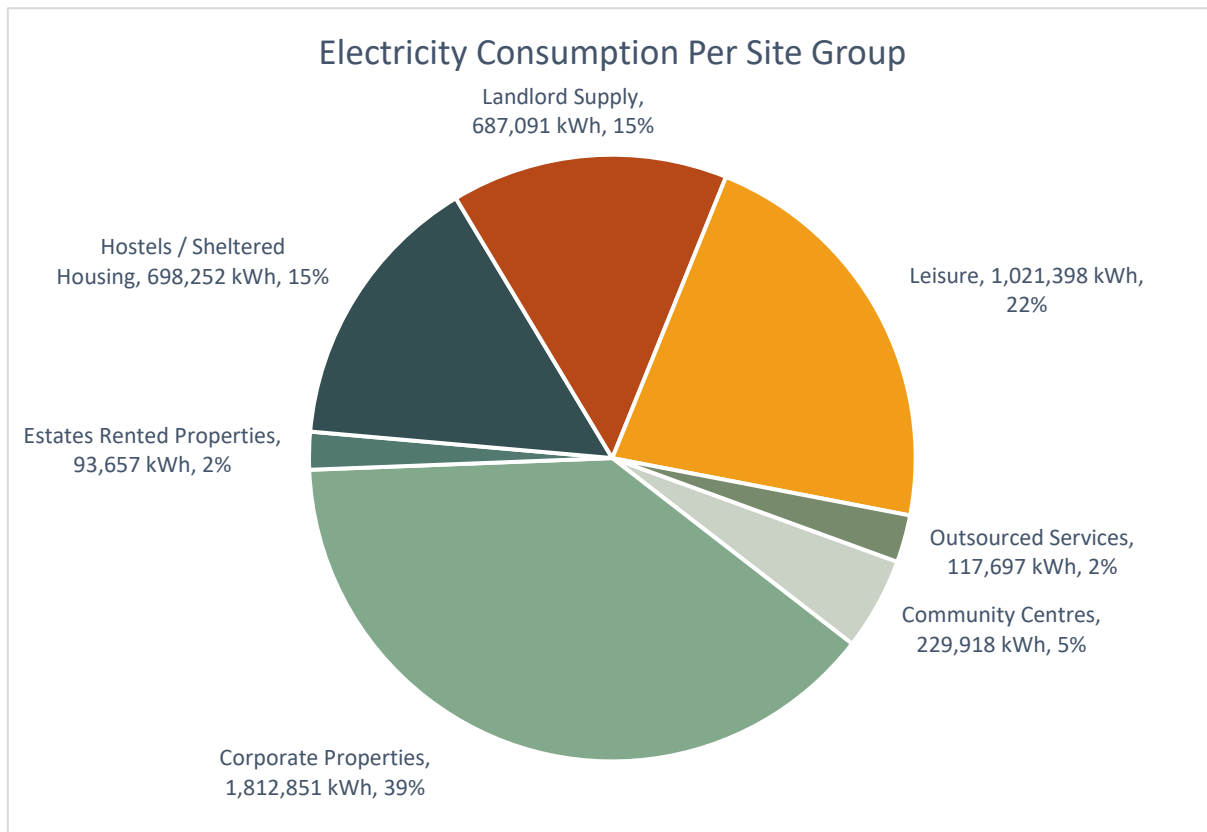


Figure 5 Electricity consumption per site group

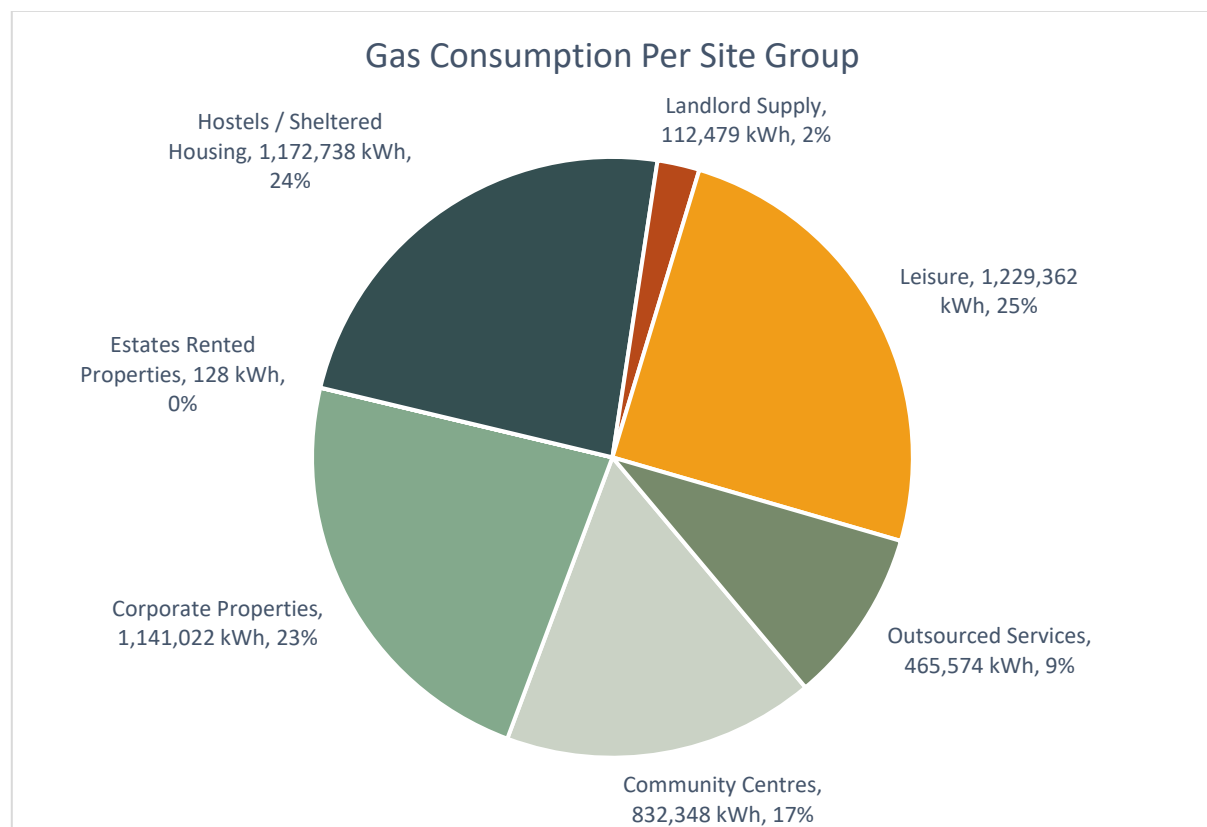


Figure 6 Gas consumption per site group

As seen in Table 4, in this reporting year, Scope 1 emissions decreased by 128.9 tCO₂e, Scope 2 emissions decreased by 115.8 tCO₂e, and Scope 3 emissions increased by 91.7 tCO₂e. Overall, that represents a decrease of 153 tCO₂e from the previous reporting period.

Welwyn Hatfield Council's managed gas and electricity accounted for over 65% of the total emissions for the Welwyn Hatfield district, being the two main sources of emissions. The next greatest source of emissions generated was by commodities used within buildings not directly controlled by Welwyn Hatfield Council, for example, the Leisure sites. The remaining sources of emissions were from transmission and distribution, business travel and paper disposal, which equated to under 6% of the total CO₂e.

The potential reasons for the decrease in Scope 1 and Scope 2 emissions may be down to a number of different factors.

On-site renewable sources of energy, such as solar energy, may have been utilised more this year than in previous years. This lowers the need to import electricity from the grid. As solar is a renewable energy source, there are no carbon emissions associated with the generation of the energy.

Another potential reason for the decrease is a change in a property's ownership or occupancy status. There are several properties within Welwyn Hatfield Council's portfolio which were closed for the duration of the reference period. Although there are many negative implications in a property not being occupied, the silver lining is that no or very limited utilities were consumed at these sites; therefore, there were no or minuscule carbon emissions emitted by these properties.

More broadly speaking, because of an increase in the number of renewable sources of generation and technological advancements, the carbon emissions associated with electricity generation have dropped this year. The 2024 figure of 0.20705 kgCO₂e per kWh of electricity is down from 0.207074 kgCO₂e in 2023. This may not seem like a significant difference, but when it comes to calculating the emissions associated with millions of kWh of consumption, the slight decrease does have an impact.

In addition, energy efficiency measures such as the installation of LEDs at several sites and staff awareness campaigns around energy efficiency and use have been implemented.

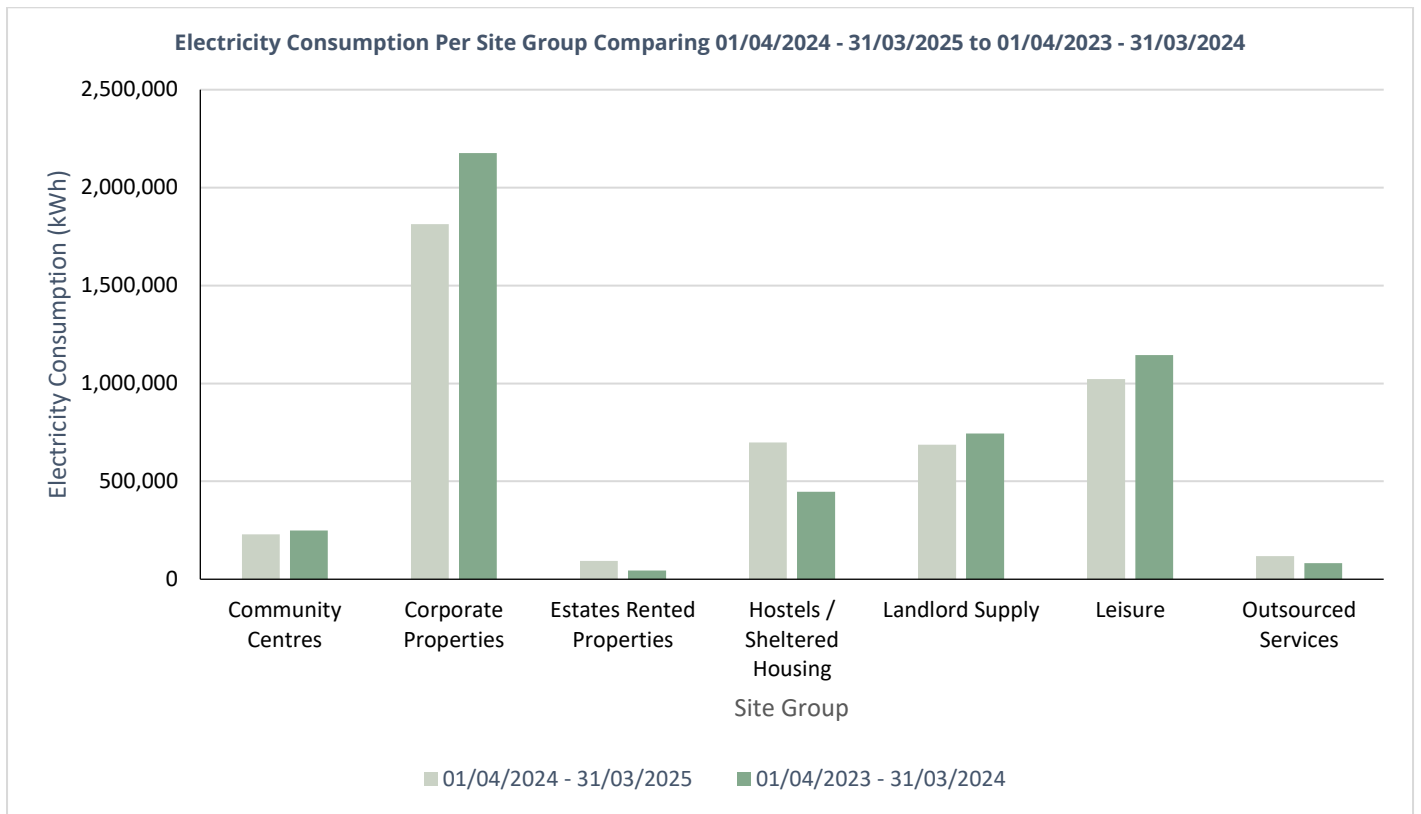


Figure 7 Electricity consumption per site group comparing this financial year to the previous

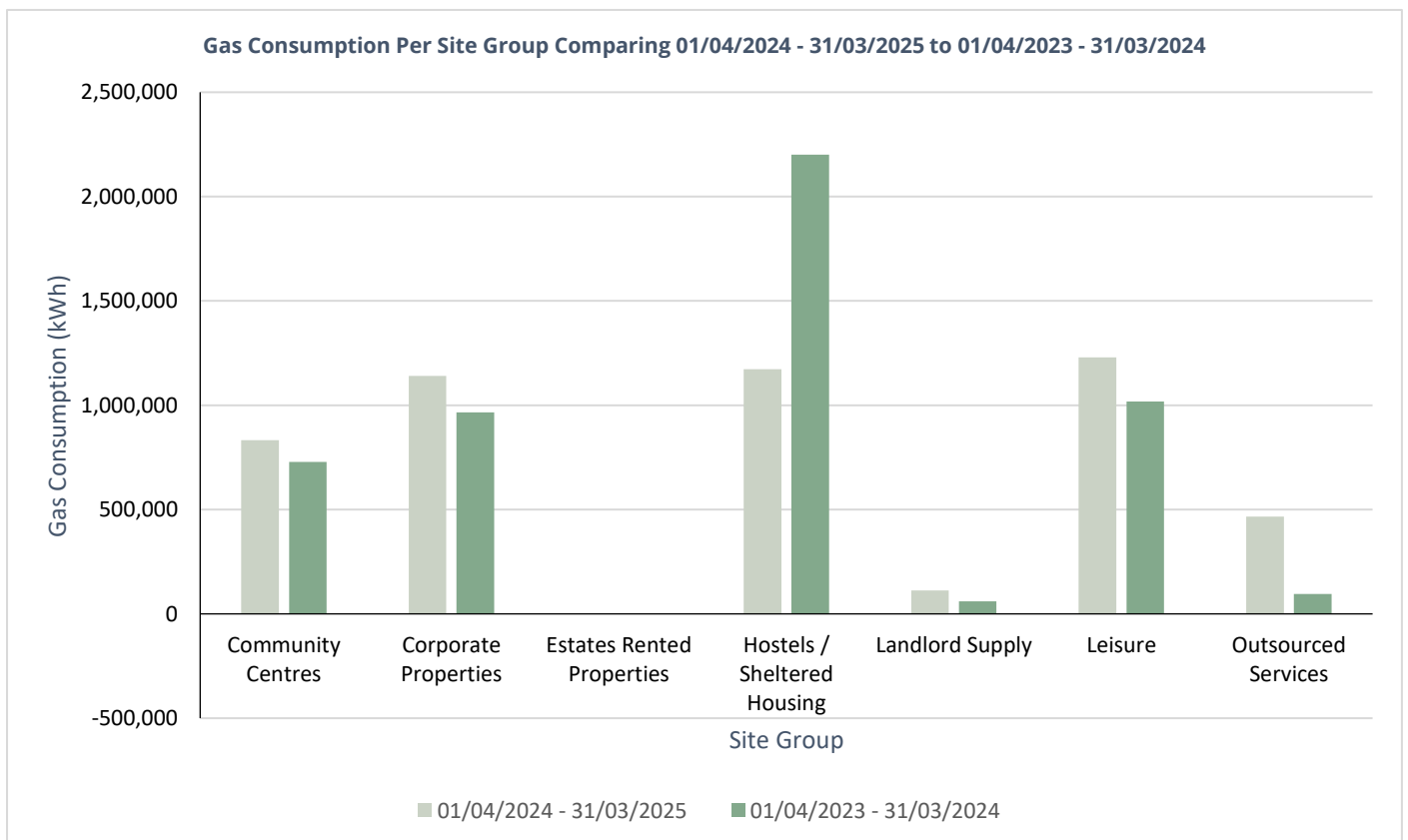


Figure 8 Gas consumption per site group comparing this financial period to the previous

6 Appendix

6.1 Backing Data

Scope	Emission Source	Category	Source Unit	Total (12 months)	kWh	kgCO ₂ e	tCO ₂ e
Scope 1	Natural Gas	WHC Managed Gas	kWh	3,258,588	3,258,588	595,996	596.0
Scope 1	Class I Van (up to 1.305 tonnes) - Diesel	Company-Owned Vehicles	miles	8,750	8,533	2,163	2.2
Scope 1	Class II Van (1.305 to 1.74 tonnes) - Diesel	Company-Owned Vehicles	miles	23,421	28,066	7,099	7.1
Scope 1	Class III Van (1.74 to 3.5 tonnes) - Diesel	Company-Owned Vehicles	miles	4,531	7,912	1,996	2.0
Scope 1	medium car - Hybrid (Fossil Fuels Only)	Company-Owned Vehicles	miles	4,520	3,431	836	0.8
Scope 2	Electricity	WHC Managed Electricity	kWh	3,428,112	3,428,112	709,790	709.8
Scope 2	Average Car - Battery Electric (Electricity Only)	Company-Owned Vehicles	miles	5,806	1,965	407	0.4
Scope 3	Electricity	Non-WHC Managed Electricity	kWh	1,232,752	1,232,752	255,241	255.2
Scope 3	Natural Gas	Non-WHC Managed Gas	kWh	1,695,064	1,695,064	310,027	310.0
Scope 3	Transmission and Distribution	Transmission and Distribution (WHC Managed Elec.)	kWh	3,428,112	0	62,734	62.7
Scope 3	Paper Usage (Primary Material Production)	Paper Usage (Primary Material Production)	Tonnes	0.44	0	586	0.6
Scope 3	Paper Usage (Closed Loop Recycled)	Paper Usage (Closed Loop Recycled)	Tonnes	3.36	0	3,512	3.5
Scope 3	Train Travel	Public Transport	passenger.km	20,949	0	743	0.7
Scope 3	Tube Travel	Public Transport	passenger.km	100	0	3	0.0
Scope 3	Average car - Unknown Fuel	Public Transport	miles	33	37	9	0.0
Scope 3	Average Van - unknown fuel	Non-Company-Owned Vehicles	miles	527	840	211	0.2
Scope 3	Average Car - Battery Electric (Electricity Only)	Non-Company-Owned Vehicles	miles	465	157	33	0.0

Scope	Emission Source	Category	Source Unit	Total (12 months)	kWh	kgCO ₂ e	tCO ₂ e
Scope 3	large car - Diesel	Non-Company-Owned Vehicles	miles	3,998	5,277	1,334	1.3
Scope 3	large car - Petrol	Non-Company-Owned Vehicles	miles	2,932	5,481	1,269	1.3
Scope 3	medium car - Diesel	Non-Company-Owned Vehicles	miles	6,254	6,680	1,692	1.7
Scope 3	medium car - Hybrid (Fossil Fuels Only)	Non-Company-Owned Vehicles	miles	2,810	2,133	520	0.5
Scope 3	medium car - Petrol	Non-Company-Owned Vehicles	miles	12,861	15,832	3,669	3.7
Scope 3	small car - Diesel	Non-Company-Owned Vehicles	miles	12,706	11,278	2,862	2.9
Scope 3	small car - Hybrid	Non-Company-Owned Vehicles	miles	3,400	2,583	617	0.6
Scope 3	small car - Petrol	Non-Company-Owned Vehicles	miles	34,208	34,106	7,911	7.9
Scope 3	Average car - Unknown Fuel	Non-Company-Owned Vehicles	miles	6,519	7,257	1,751	1.8

Table 5 Welwyn Hatfield Council input data summary

Scope	Emissions Source	Sum of tCO ₂ e	Percentage of Total Emissions
Scope 1	WHC Managed Gas	596	30.21%
Scope 1	Company-Owned Vehicles	13	0.63%
Scope 2	WHC Managed Electricity	710	35.98%
Scope 3	Non-WHC Managed Gas	310	15.71%
Scope 3	Non-WHC Managed Electricity	255	12.94%
Scope 3	Transmission and Distribution (WHC Managed Elec.)	63	3.18%
Scope 3	Non-Company-Owned Vehicles	22	1.11%
Scope 3	Paper Usage (Closed Loop Recycled)	4	0.18%
Scope 3	Public Transport	0.75	0.04%
Scope 3	Paper Usage (Primary Material Production)	0.59	0.03%
Total Carbon Emissions		1,973	

Table 6 Welwyn Hatfield Council total emissions breakdown

Overall Summary (01/04/2024 – 31/03/2025)				
Scope	Total kWh	Total kgCO ₂ e	Total tCO ₂ e	Percentage
Scope 1	3,306,530	608,089	608	31%
Scope 2	3,430,076	710,198	710	36%
Scope 3	3,019,478	654,722	655	33%
Total	9,756,084	1,973,008	1,973	100%

Table 7 FY 2024/2025 Overall Summary

Site Group	Elec. Consumption (kWh) 01/04/2024 – 31/03/2025	Elec. Consumption (kWh) 01/04/2023 – 31/03/2024	Difference
Community Centres	229,918	248,643	-18,725
Corporate Properties	1,812,851	2,176,788	-363,937
Estates Rented Properties	93,657	44,832	48,825
Hostels / Sheltered Housing	698,252	446,990	251,262
Landlord Supply	687,091	744,031	-56,940
Leisure	1,021,398	1,144,066	-122,668
Outsourced Services	117,697	82,087	35,610
Grand Total	4,660,864	4,887,437	-226,573

Table 8 Electricity consumption per site group

Site Group	Gas Consumption (kWh) 01/04/2024 – 31/03/2025	Gas Consumption (kWh) 01/04/2023 – 31/03/2024	Difference
Community Centres	832,348	728,351	103,997
Corporate Properties	1,141,022	965,560	175,462
Estates Rented Properties	128	-2	130
Hostels / Sheltered Housing	1,172,738	2,201,135	-1,028,397
Landlord Supply	112,479	60,300	52,179
Leisure	1,229,362	1,018,424	210,938
Outsourced Services	465,574	95,672	369,902
Grand Total	4,953,652	5,069,440	-115,788

Table 9 Gas consumption per site group



Contact us

TEAM (Energy Auditing Agency Ltd.) | 3 Radian Court, Knowlhill, Milton Keynes, MK5 8PJ
01909 690 018 | enquiries@teamenergy.com | teamenergy.com