

Appendix C: Watford Borough Council Greenhouse Gas Emissions Report

2023-2024



WATFORD
BOROUGH
COUNCIL

1. Net Zero Commitment

Watford Borough Council has committed to achieving net zero carbon equivalent by 2030 for its own operations. This means we are measuring and reducing the greenhouse gases (GHGs) emitted through our operations and activities (both direct and indirect), and then, for those emissions which can't be eliminated, offset to achieve net zero.

Key greenhouse gases are carbon dioxide, methane, and nitrous oxide. Other greenhouse gases, such as refrigerants, will not be included in our calculations but we will seek to ensure that these GHGs are identified if we use or emit them, and eliminated or reduced and offset.

To achieve net zero by 2030 for Council emissions, the below stepped increases in reduction have been agreed.

Table 1 – Watford Borough Council emissions reduction trajectory

Year	Percentage reduction (%)	Percentage offsetting (%)	Total (%)
2025	22	6	28
2027	40	11	51
2029	60	19	79
2030	75	25	100

To find out more about our path to achieving net zero, read [Watford's Environmental Strategy: Addressing the Climate and Ecological Emergency, 2023-2030](#) and the accompanying [Delivery Plan, 2023-2025](#).



2. Council Overview

Watford is a vibrant and diverse borough, located just within the M25 in the south-west of Hertfordshire and is one of ten districts within the county. Watford is a predominantly urban borough, with a population of 102,000 (Census, 2021) covering just 8.3 square miles making it the most densely populated local authority area within England.

Table 2 – Watford Borough Council overview

Year	FY 2023-2024
Number of full-time officers	224.27
Operational sites – owned	33
Operational vehicles – owned	11
Leased sites (Leisure centre) – owned	2

Watford has a relatively small number of officers because several key services, such as leisure centres (Everyone Active), waste collection and parks and green spaces maintenance (Veolia), are contracted out. Watford does, however, own the waste collection and green space maintenance vehicles used by Veolia.

3. Reporting Period

April 2023 – March 2024.



4. Reporting Boundary

Watford Borough Council uses an operational control boundary methodology, as established by the [GHG Accounting Tool](#) produced by Local Partnerships for the Local Government Association (LGA).

This means the council will report on all sources of greenhouse gas emissions over which it has operational control. The authority has operational control over a service if it has full authority to introduce and implement its operating policies.

The council continues to seek to influence the reduction of emissions beyond its operational control.

5. Reporting Scopes

Watford Borough Council has included emissions for Scope 1, Scope 2 and Scope 3 categories. Of the fifteen Scope 3 categories identified by the Greenhouse Gas Protocol (WRI, 2011: P.32), the following have been included either in-part or fully:

- Purchased goods and services
- Fuel and energy related activities
- Waste generated in operations
- Business travel
- Employee commuting
- Downstream leased assets

This is an expansion from our baseline 2019 greenhouse gas emissions report. Below is a detailed explanation on efforts to improve the completeness of our Scope 3 emissions data.



i. Purchased Goods and Services

Our 2019 baseline greenhouse gas emissions report only included water supply. We have now included the emissions from our IT and paper and board, based on the tonnage of materials used. We recognise that product specific emissions data is more accurate and will work with suppliers to achieve this. Furthermore, we are working to include emissions from construction and food and drink.

ii. Fuel and Energy Related Activities

This refers to activities not included in Scope 1 or Scope 2, such as upstream emissions of purchased fuels and electricity, commonly referred to as Well To Tank (WTT) emissions or transmission and distribution (T&D) losses. Our 2019/2020 baseline and 2023/2024 greenhouse gas emissions report include our WTT and T&D emissions.

iii. Waste Generated in Operations

We now have a proxy waste estimate for some of our operational sites – the Town Hall (refuse and recycling), Cemetery (refuse and recycling) and the Market (recycling). For waste from the Town Hall and Cemetery, we tracked how full the bins were throughout October 2023 and converted the volume into tonnage then into emissions. The cardboard waste at the Market is weighed in a compactor. We are in conversations with our waste contractor, Veolia, and facilities managers at various site to both expand the sites where we can measure waste generated and improve the accuracy of the data.



iv. Business Travel

Business travel was included in our 2019 baseline greenhouse gas emissions report. We use the expenses data for business travel by car to calculate the emissions. Currently, we do not keep the relevant data to calculate emissions for business travel by public transport. We are speaking with our Human Resources team to resolve this.

v. Employee Commuting

Our 2019 baseline greenhouse gas emissions report did not include employee commuting. In Autumn 2023, we sent out a staff survey with questions about commuting and homeworking. With 68 respondents, we were able to calculate an estimated emissions number for our commuting and homeworking. We will create a standalone biannual survey and use the data to create a staff travel and homeworking plan.

vi. Downstream Leased Assets

Our 2019 baseline greenhouse gas emissions report included emissions from our leisure centres, parks and green spaces maintenance and waste contractors. For future reports, we are looking to report on emissions from our web server and data centre.



6.2019/2020 Greenhouse Gas Emissions (Baseline year)

Watford Council commissioned APSE to calculate our greenhouse gas emissions in the financial year 2019/2020. In 2019/2020, Watford Council emitted 2,227.8 tonnes CO₂e¹.

Table 3 – Watford Borough Council Baseline Greenhouse Gas Emissions 2019/2020

Scope	Emission Source	Tonnes CO ₂ e	% Split
1	Fuel – Natural Gas	278.24	12.49
	Fuel – Petrol	9.66	0.43
	Fleet – Waste Collection	297.25	13.34
	Fleet – Parks and Green Spaces	165.05	7.41
2	Electricity	431.39	19.36
3	Purchased Goods and Services – Water	3.87	0.17
	Fuel/Energy Related Activities – WTT, T&D	221.71	9.95
	Business Travel (Car)	5.63	0.25
	Downstream Leased Assets – Leisure Centres	815	36.58
Total		2227.8	100

¹Our baseline figure was revised from 1,980 to 2227.8 tonnes CO₂e, after updating our leisure centres data and including the WTT emissions of our contractor travel.



7.2023/2024 Greenhouse Gas Emissions Overview

There are two figures to report on as the Council's greenhouse gas emissions. The first is our 2023/24 emissions using the same emission sources collected in 2019/2020. The second is the total emissions using updated emission sources. This double reporting enables us to compare progress against our baseline, while also transparently reporting emissions based on a more accurate and more complete dataset.

2023/2024 Greenhouse Gas Emissions – baseline emission sources

2091.7 tonnes CO₂e

Council emissions have dropped by 136 tonnes CO₂e since our 2019/2020 baseline. This can largely be attributed to Town Hall Decarbonisation works that have reduced our gas and electricity demand for key operational buildings.

2023/2024 Total Greenhouse Gas Emissions – updated emission sources

2554.7 tonnes CO₂e



8. 2023/2024 Greenhouse Gas Emissions (Baseline)

In 2023/2024, Watford Council emitted 2,091.7 tonnes CO₂e. Per resident, that's **20.5 kilograms CO₂e**.

Table 4 – Watford Borough Council Greenhouse Gas Emissions 2023/2024 (baseline)

Scope	Emission Source	% Split	Tonnes CO ₂ e	% Change from 2019
1	Fuel – Natural Gas	6.57	137.48	-15.55
	Fleet – Waste Collection	21.95	459.04	
	Fleet – Parks and Green Spaces	7.48	156.52	
2	Electricity	11.70	244.78	
3	Purchased Goods and Services – Water	0.10	2.04	4.36
	Fuel/Energy Related Activities – WTT and T&D	4.41	92.19	
	Business Travel (Car)	0.27	5.75	
	Downstream Leased Assets – Leisure Centres	47.52	993.9	
Total		100	2091.7	-6.11



*Table 5 – Watford Borough Council Greenhouse Gas Emission Progress**

Scope	Emission Source	2019/20	2022/23	2023/24
1	Fuel – Natural Gas	278.24	161.21	137.48
	Fuel – Petrol	9.66	0	0
	Fleet – Waste Collection	297.25	462.53	459.04
	Fleet – Parks, Green Spaces and Streets	165.05	181.22	156.52
2	Electricity	431.39	254.54	244.78
3	Purchased Goods and Services – Water	3.87	1.35	2.04
	Fuel/Energy Related Activities – WTT and T&D	221.71	103	92.19
	Business Travel (Car)	5.63	5.48	5.75
	Downstream Leased Assets – Leisure Centres	815	903.2	993.9
Total		2227.8	2072.53	2091.7

*Financial years 2020/21 and 2021/22 have not been included in this progression comparison because lockdowns from Covid-19 render results a misrepresentation of typical council operations.



Watford Borough Council won £3.7 million in Public Sector Decarbonisation Funding to improve the energy performance of the Town Hall and Watford Colosseum and to transition to low carbon heating for both heritage buildings. In addition, the works include installing PV panels for renewable energy, the replacement of the windows to reduce heat loss, as well as new insulation and air source heat pumps to keep the building warm. These works have resulted in the notable reduction in emissions for natural gas and electricity.

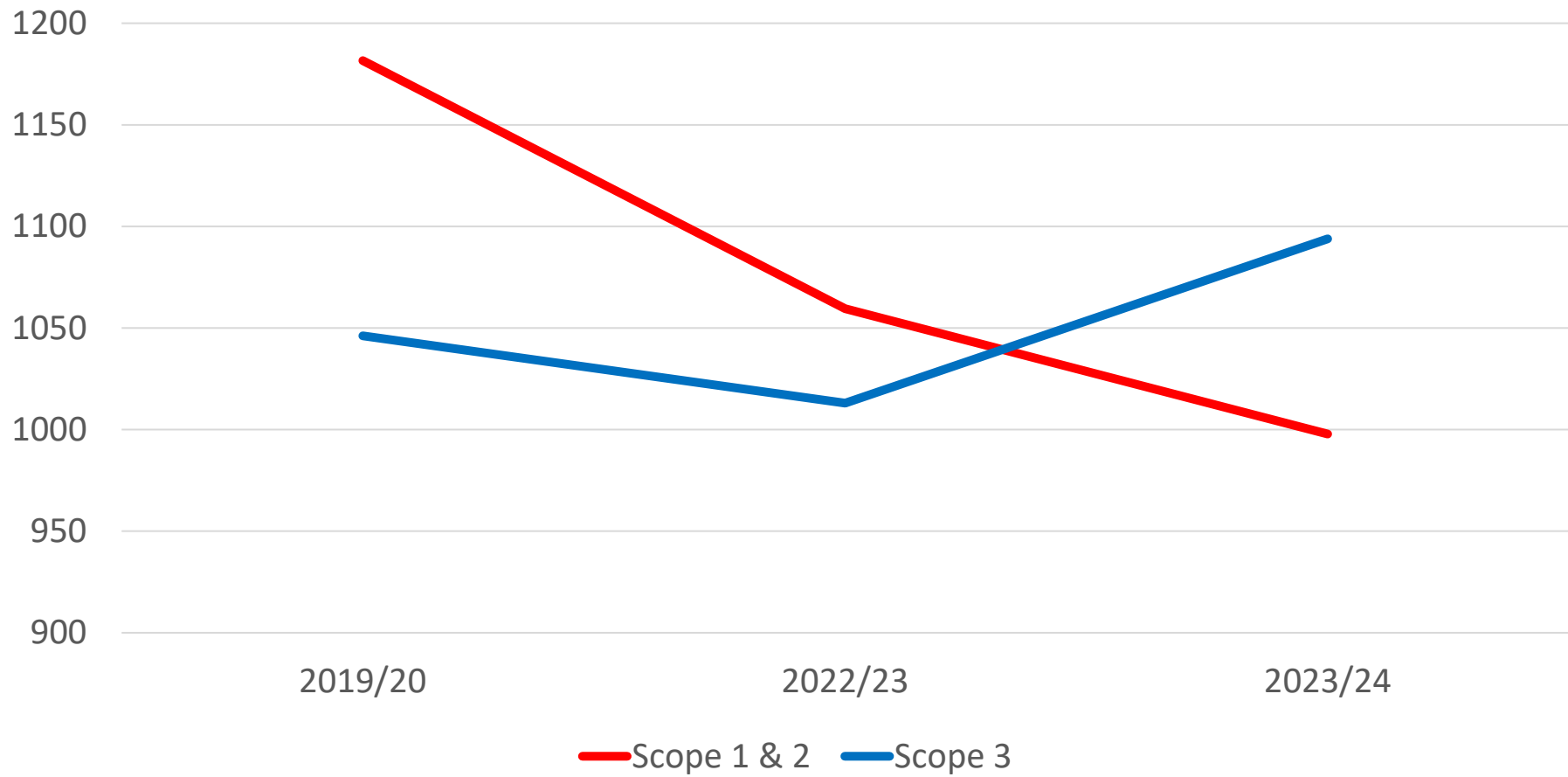
Increases in greenhouse gas emissions for waste collection can be explained by the introduction of food waste collection across the borough. Whilst this has increased council emissions, the collection of food waste separate to residual waste is important to reducing borough emissions. Furthermore, a project to reduce recycling collection from weekly to fortnightly in Autumn 2024 will result in emission reductions for our waste collection service.

Emissions from our leisure centres have risen from 37% to nearly 50% of Council emissions. The Council are engaging with our leisure centre provider, Everyone Active, on reducing emissions. Most recently, Watford Borough Council have successfully applied for and been awarded £403,900 from Sports England to reduce energy usage at Woodside Leisure Centre swimming pool.



Figure 1 - Cumulative Progress for Environmental Strategy period 2023-2030

Greenhouse Gas Emissions Progress (tCO₂e)



9.2023/2024 Greenhouse Gas Emissions (Updated)

Table 6 - Watford Borough Council Greenhouse Gas Emissions 2023/2024 (updated)

Scope	Emission Source	Tonnes CO ₂ e	% Split
1	Fuel – Natural Gas	137.48	5.38
	Fuel – Petrol	0	0
	Fleet – Waste Collection	459.04	17.97
	Fleet – Parks, Green Spaces and Streets	156.52	6.13
2	Electricity	249.2	9.75
3	Purchased Goods and Services – Water	2.04	0.08
	Purchased Goods and Services – Paper, IT	285.12	11.16
	Fuel and Energy Related Activities – WTT and T&D	92.19	3.61
	Waste Generated in Operations	22.68	0.89
	Business Travel (Car)	5.75	0.23
	Employee Commuting and Home Working	150.8	5.90
	Downstream Leased Assets – Leisure Centres	993.9	38.90
Total		2554.72	100



References

- WRI (2011) Greenhouse Gas Protocol Scope 3. Available at: [Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf \(ghgprotocol.org\)](#). Accessed: 29/02/2024.

