



Greenhouse Gas Emissions Report

Babergh District Council

April 2024 to March 2025



Contents

Executive Summary	2
1 Introduction.....	6
2 Methodology.....	6
2.1 Carbon Dioxide Equivalent (CO ₂ e) calculations	6
2.2 Scope 1, 2 and 3 emissions.....	7
2.4 Data Gaps and Reliability.....	10
3 Analysis.....	11
3.1 Emissions by scope.....	11
3.2 Emissions by sector	12
3.3 Pathway to Net Zero	15
4 CO ₂ mitigation.....	16
5 Conclusion and next steps.....	17
Appendix 1	18
References.....	18
Glossary.....	18

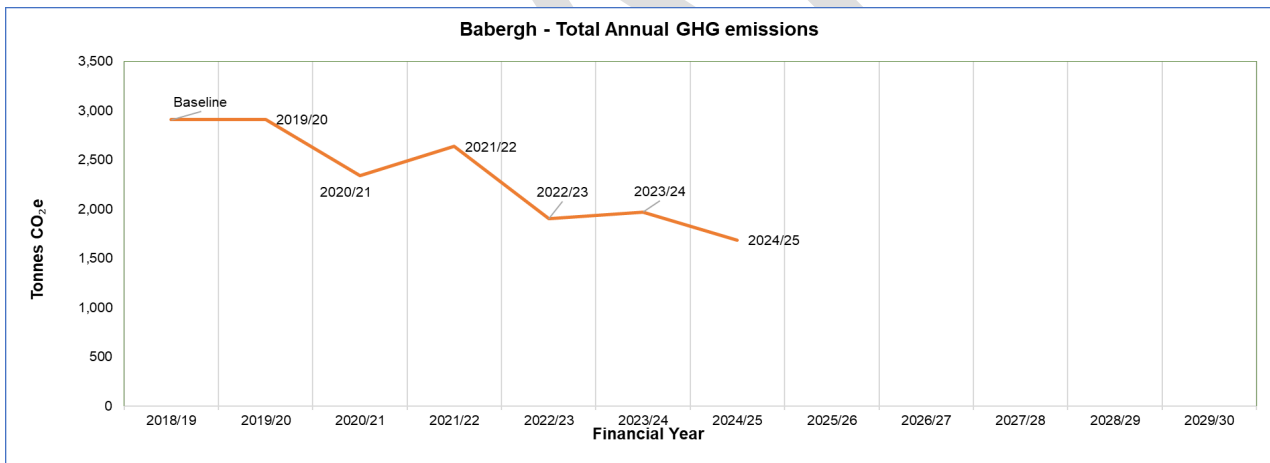


Executive Summary

In 2019, Babergh District Council, together with Mid Suffolk District Council, declared a climate emergency. This included the ambition of the councils to achieve net zero emissions by 2030 against the 2018 combined baseline emissions of 5,933 tCO₂e. As the language and definitions have evolved around target setting, the aim of the council is now best expressed as a Net Zero target, in that it is covering all greenhouse gases where measurable, and the target is met through reducing emissions first to a minimum and then finding ways to offset any hard-to-tackle residual emissions. This stands in contrast to simply offsetting all emissions to meet carbon neutrality.

This report aims to set out our council’s Greenhouse Gas (GHG) emissions and monitor progress towards our Net Zero goal. This annual analysis is crucial in identifying areas that need greater focus, as well as understanding the impact of measures implemented in previous reports.

Graphic 1: The progress from 2018-2030 to Net Zero for Babergh



For the 2024/25 reporting year, emissions were 1,687 tCO₂e, which is a 42% reduction against baseline. It should be noted that our electricity is purchased from certified renewable energy sources and so the generation of our electricity can be deemed to have zero emissions (although transmission of that electricity is still deemed to have emissions as it uses the national grid, which is reflected in Scope 3). Our total emissions would be reduced by 242 tCO₂e however, conventions require us to use the typical electricity grid emissions figure for reporting purposes. This reflects that the actual electricity used in our



premises may have come from any source; it is simply our contract that requires our provider to ensure that the equivalent of our consumption is supplied to the grid somewhere via renewable sources.

As well as an overall tonnage of emissions, the reporting requirements are that emissions are categorised into scopes. The table below illustrates this, and explained further in Section 2.3:

Scope	
1	These are largely emissions from the combustion of fuels that the council directly consumes e.g., gas, diesel, and petrol in the direct delivery of council business by council employees.
2	These are indirect emissions such as electricity use in council premises or from heat networks.
3	These are other indirect emissions derived from up- and down- stream activities of the councils, including from third party contractors supplying services on behalf of the councils.

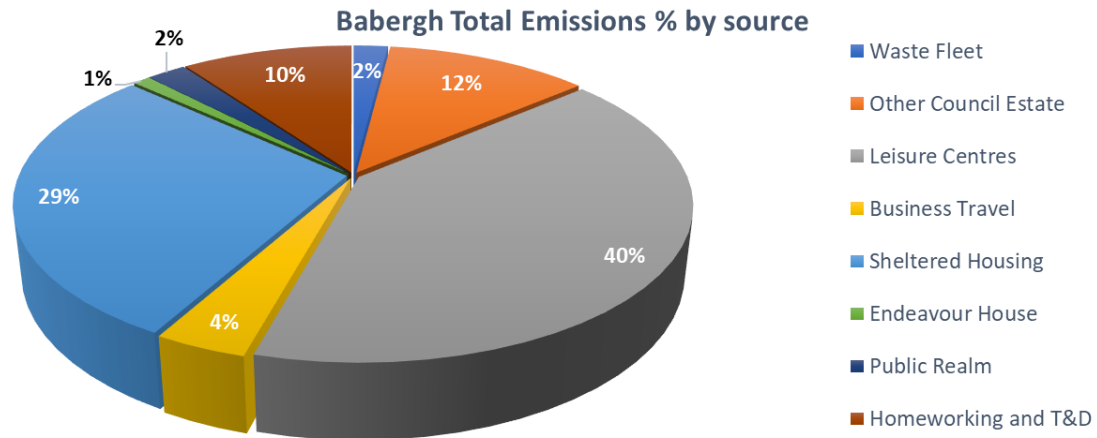
Table 1. Simplified explanation of Scopes in emissions reporting

Table 2. Summary of emissions by Scope and source for 2024-2025

Scope 1 emissions	tCO2e
Burning Oil	70.9
Endeavour House Gas	6.7
Sheltered Housing Gas	367.3
Diesel (Public Realm)	21.4
Other council estate Gas	24.5
HVO (Public Realm)	12.0
Scope 1 total (tonnes CO2e)	492.7
Scope 2 emissions	tCO2e
Endeavour House electricity	10.5
Sheltered Housing electricity	114.4
Electric vehicle electricity	15.1
Streetlighting electricity	21.7
Other council estate	80.7
Scope 2 total (tonnes CO2e)	242.4
Scope 3 emissions	tCO2e
Leisure Centre natural gas	532.2
Leisure Centre electricity	149.0
Business travel – Employees	60.2
Business travel – Councillors	4.5
Third Party Contracted Diesel	22.5
Third Party Contracted HVO	11.0
Endeavour House water	0.2
Other Council estate water	1.3
Water in Sheltered Houses	1.6
Homeworking emissions	126.3
Water use at Leisure Centres	2.0
Transmission and Distribution electricity	40.9
Scope 3 total (tonnes CO2e)	951.7
Total across all Scopes (tCO2e)	1,686.8

Note, figures have been rounded to 1 decimal place for convenience, so sums of individual sources may not reflect the actual totals for each Scope.

Graphic 2: Pie chart showing the % CO2e produced by each source 2024/25



The leisure centres (Kingfisher and Hadleigh) emit the most greenhouse gas emissions, accounting for 40% of all emissions. The second largest source of emissions (29%) is from sheltered housing units. The constant operation of these buildings inevitably makes them the highest emitters and a focus for energy reduction efforts.

12% of emissions are from ‘other council estate’ properties and services delivered by the council, which are essentially all other council buildings which are not sheltered housing such as public toilets, temporary housing and landlords lighting. This is an increase from last year as some utilities have been identified for the first time due to being outside our utility contract.



1 Introduction

This Greenhouse Gas report for Babergh is for the fiscal reporting year 2024/25. The report defines the trajectory of greenhouse gas emissions since the baseline year 2018/2019 to support policymaking and action planning towards the desired outcome of net zero by 2030.

This report, as with the previous ones, uses 2018/19 emissions data as the baseline and measures the progress in terms of carbon emission reduction.

2 Methodology

The methodology to monitor, measure and report the council's Greenhouse Gas Emissions follows the HM Government Environmental Reporting guidelines¹, along with the GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol Corporate Standard).

For each council-operated service delivery activity, we assess both direct and indirect energy consumption including electricity, gas and water usage (where available) in council buildings; fuel consumption for council-owned vehicles and mileage of private (and leased) cars used for council business.

The carbon footprint of each activity and building is evaluated using consumption data (kWh). Most utility data is generated by Vertas who provide utility bill validation services to the council. Directly billed utility data is provided by the accounts team, and mileage data is provided in-house or by our business partners such as Serco.

2.1 Carbon Dioxide Equivalent (CO₂e) calculations

Conversion factors, which are published annually in June by the UK Government², were then applied to consumption and activity figures (electricity, gas, water, fuel, miles driven etc.) to produce an estimate of the CO₂e emissions associated with that activity. CO₂e is a unit of measurement that puts the climate impact of other greenhouse gases into an equivalence of carbon dioxide.

¹ [Sustainability Reporting Guidance 2023-24 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/sustainability-reporting-guidance-2023-24)

² [Greenhouse gas reporting: conversion factors 2024 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024)



Table 3: 2024/2025 fiscal year UK Government conversion rates

UK Government Conversion Factors	kg CO2e /unit of activity	UK Government Conversion Factors	kg CO2e /unit of activity
Natural Gas (m³)	0.20270	Petrol (av. car) (miles)	0.26187
Burning oil (ltr)	2.54016	Av. car (fuel unknown) (miles)	0.26915
Petrol (aver biofuel) (miles)	2.06916	Av. car (plug in hybrid) (miles)	0.14678
Diesel (aver biofuel) (miles)	2.57082	Biodiesel HVO (ltr)	0.03558
Gasoil (ltr)	2.75541	Electricity (grid mix + T and D) (kWh)	0.19553
Elec generated (grid mix) (kWh)	0.17700	Water (m3)	0.19130
Elec (transmission & distribution) (kWh)	0.01853	Homeworking (per FTE Working Hour)	0.33378
Diesel (aver car) (miles)	0.27849		

For the purposes of this report, we have used the UK government 2024/25 conversion rates to maintain a cohesive and dependable approach to our carbon reporting that can be replicated annually.

2.2 Scope 1, 2 and 3 emissions

This Greenhouse Gas report primarily focuses on Scope 1 (direct emissions) and Scope 2 (indirect emissions from purchased energy). It is extremely difficult to quantify the full extent of Scope 3 emissions as the range and complexity of sources involved is far reaching and involves suppliers and contractors as shown elsewhere in this document, but we are keen to make progress in this area wherever we can. The work currently taking place by the Head of Procurement is key to enabling us to reduce our Scope 3 emissions.

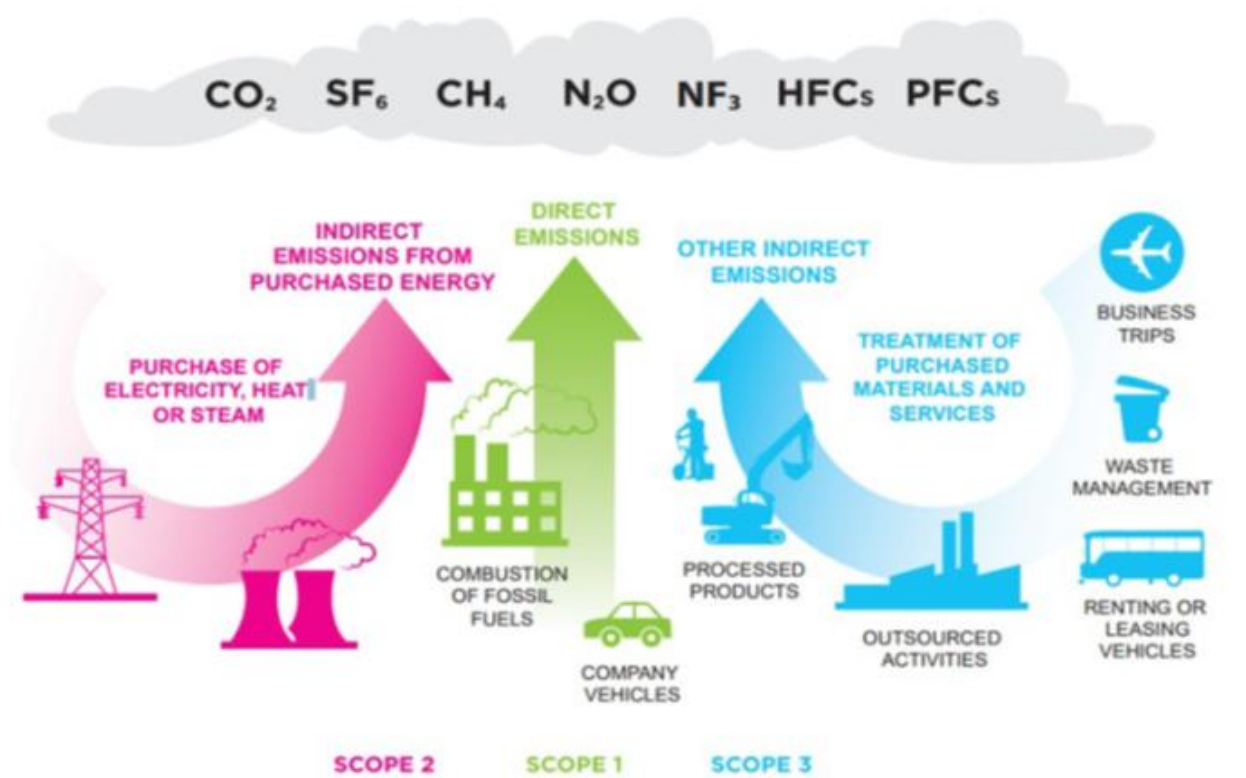
Actions taken to date include:

- The introduction in 2025 of an Environmental Ask of our supply chain. A clear ask of our suppliers to reduce their emissions.
- Supplier registration on Suffolk Sourcing, the Councils e-procurement system, includes questions regarding the supplier's progress to reduce emissions, making it

really clear to suppliers that wish to bid for the council’s contracts that commitment to reduce their emissions are taken into consideration when we evaluate bids.

- Template Social Value evaluation criteria, which includes requesting a response from bidders regarding how they are meeting the Council’s Environmental Ask.
- Working with contract managers via the Contract Management Network to raise awareness of the Council’s Environmental Ask and enable them to contract manage the environmental impact of their contracts.
- Introduction of an Environmental Policy Checklist to support Contract Managers to review the Environmental Policies of their contractors.

Graphic 3: Explanation of the different Scope emissions



Save Money Cut Carbon - [What is the difference between Scope 1, 2 and 3 emissions?](#)

Table 4: The Babergh emissions included in each Scope as defined in Graphic 3.

Scopes	Included sources	Explanation and changes from last year	Excluded data and why
Scope 1	<ul style="list-style-type: none"> • Oil (Kerosene) • Sheltered Housing gas • Babergh proportion of Endeavour House gas • Diesel and HVO (Waste trucks) • Depot gas 	An amount of utility billing made direct to the council and not via our energy provider which was not recorded in 23/24.	Any gas or fuel usage in social housing stock where energy is the responsibility of the tenant. Temporary accommodation is included where the council has responsibility for paying energy bills, but some sites will be excluded
Scope 2	<ul style="list-style-type: none"> • Endeavour House electricity • Street lighting • Sheltered Housing electricity • Depot electricity • Sewage treatment works • EV charging (public use of our charge points) 	Our electricity has been used to power public facing charge points however, this offsets tailpipe emissions in our district	Any electricity usage in social housing stock where energy is the responsibility of the tenant. Temporary accommodation is included where the council has responsibility for paying energy bills, but some sites will be excluded
Scope 3	<ul style="list-style-type: none"> • Business travel – councilors and employees • Homeworking emissions • Water supply and treatment • Fuel & Energy not in scope 1 or 2, that arises from buildings leased out such as 	Third party supplier Diesel and HVO	Purchased Goods and Services. Capital Goods. Upstream transportation and distribution. Waste generated in operations. Employee commuting. Upstream leased assets.



	leisure centre electricity and gas, and Transmission and Distribution of electricity		Downstream transportation and distribution. Processing of sold products. Use of sold products. End of life treatment of sold products. Downstream leased assets. Franchises. Investments.
--	--	--	--

2.4 Data Gaps and Reliability

Accurate GHG reporting is often dependent on third parties providing building energy consumption data, which can lessen control, for example in leased buildings or with contractors.

The emissions arising from office usage in Endeavour House have been calculated by Suffolk County Council. Babergh and Mid Suffolk District Councils utilise 14% of the building area, so we have divided their calculations to work out 14% of the overall total and then divided by two to reflect Babergh's share of the space. Shared spaces, such as communal areas, the canteen and toilets are mostly included in this calculation, although it is difficult to be precise with the usage of these areas.

For Scope 3 emissions we are reliant on the provision of accurate vehicle mileage and so assumptions have been made about vehicle sizes and fuel types which affect the conversion factors. Missing or incorrect data/assumptions could therefore lead to a margin of error. Therefore, the figures in this report should not be taken as absolute figures. Whilst there will always be a need for some assumptions, it is anticipated that over time this could be reduced by improvements in energy data management and general data collection.



3 Analysis

3.1 Emissions by scope

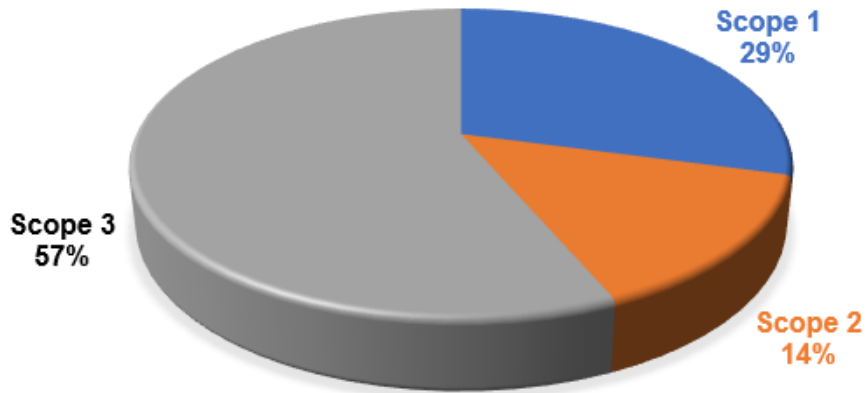
This report primarily focuses on energy, water, and travel emissions because of the difficulty in obtaining data from other activities and therefore quantifying aspects of our other Scope 3 emissions (e.g. emissions from suppliers). This is a problem experienced by all organisations, however, the Council is working to address information gaps and support the improvement of emissions from its suppliers.

Additional data fields to document environmental accreditations and to collate the emissions per £ of our suppliers have been added to the Council's Contracts Register. Where suppliers have an environmental accreditation, they will have emissions reporting in place. Contract managers supported by the Procurement Team have been asked to populate the data, so reporting can start on the Procurement Dashboard regarding progress from the 1st of April 2026. This provides a basic benchmark for the council to have oversight of our contractors' progress to reduce emissions, whilst providing a basic KPI for our contract managers to use when working with our supply chain. This approach provides a measure of the supplier's emissions rather than the emissions of our individual contracts. However, using a simple approach enables the data to be collated for all contractors who are measuring emissions.

The Council's service contract terms and conditions require contractors to have emissions reporting in place as an organisation within the first year of the contract. There are free basic tools available for suppliers to use, such as the carbon calculator on the Carbon Charter website, which offer a start for suppliers to measure emissions.

Graphic 4 shows that the biggest share of Babergh's is Scope 3 emissions at 57%. This includes items such as leisure centre gas and electricity, transmission of electricity to all our property, business travel and homeworking.

Graphic 4: Pie chart showing the % emissions in Babergh by Scope

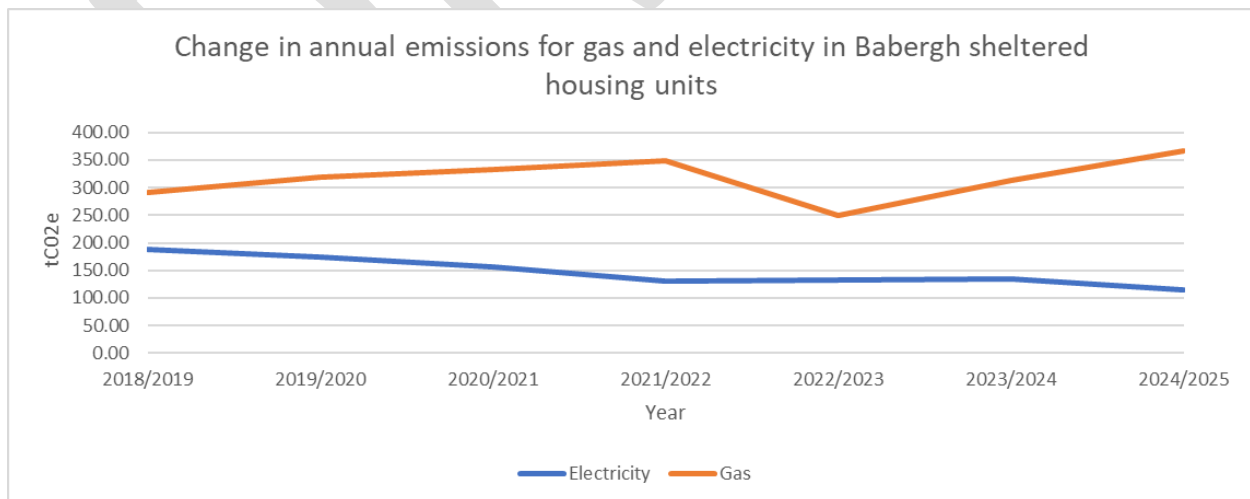


3.2 Emissions by sector

3.2.1 Sheltered Housing

Although there has been an increase in gas-based emissions; 313tCO₂e to 367tCO₂e, this is not unexpected as there will be small variations year-on-year as winter temperatures fluctuate. Electricity emissions are down 19 tonnes from 134tCO₂e to 114tCO₂e.

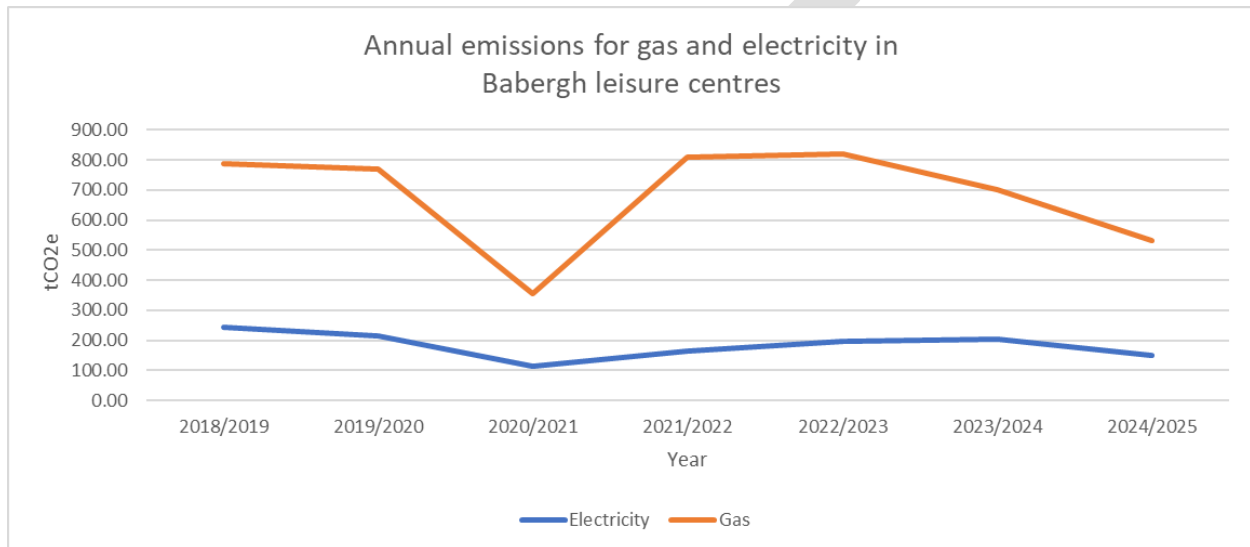
Graphic 6: Change in CO₂e emissions for gas and electricity in Babergh sheltered housing units



3.2.2 Leisure centres

A major source of the reduction in emissions from the leisure centres this year can be attributed to the closure of Kingfisher leisure centre between mid-August 2024 and mid-February 2025.

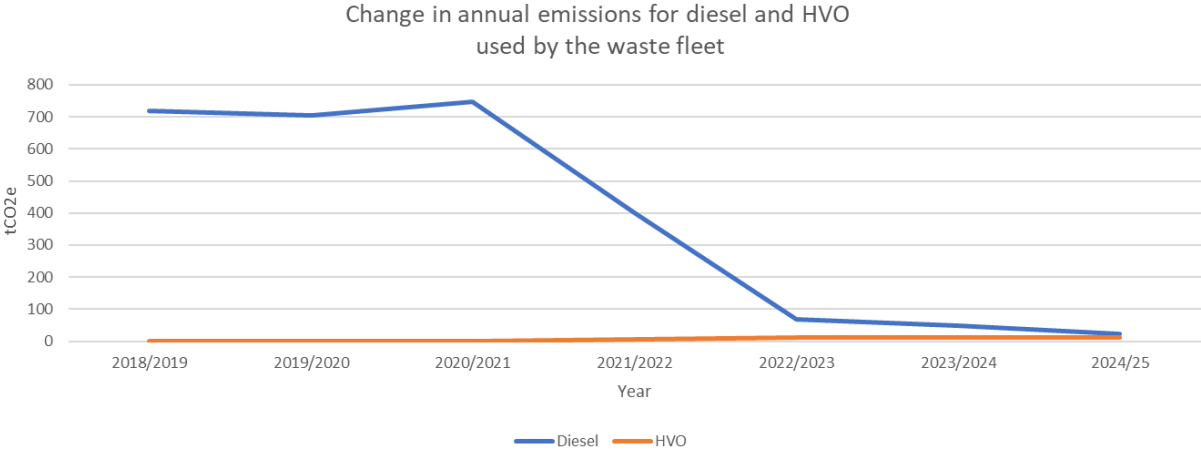
Graphic 7: Change in CO₂e emissions for gas and electricity energy used at Leisure Centres



3.2.3 Waste services

The use of HVO fuel as a replacement for diesel has significantly reduced associated emissions and is now levelling out. The next stage will be the electrification of the fleet which will be undertaken organically as vehicles reach the end of their lease period.

Graphic 8: Change in CO₂e emissions for diesel and HVO used in the waste fleet



3.2.4 Business Travel

Overall, the percentage of emissions from corporate travel has remained similar to last year.

DRAFT

3.3 Pathway to Net Zero

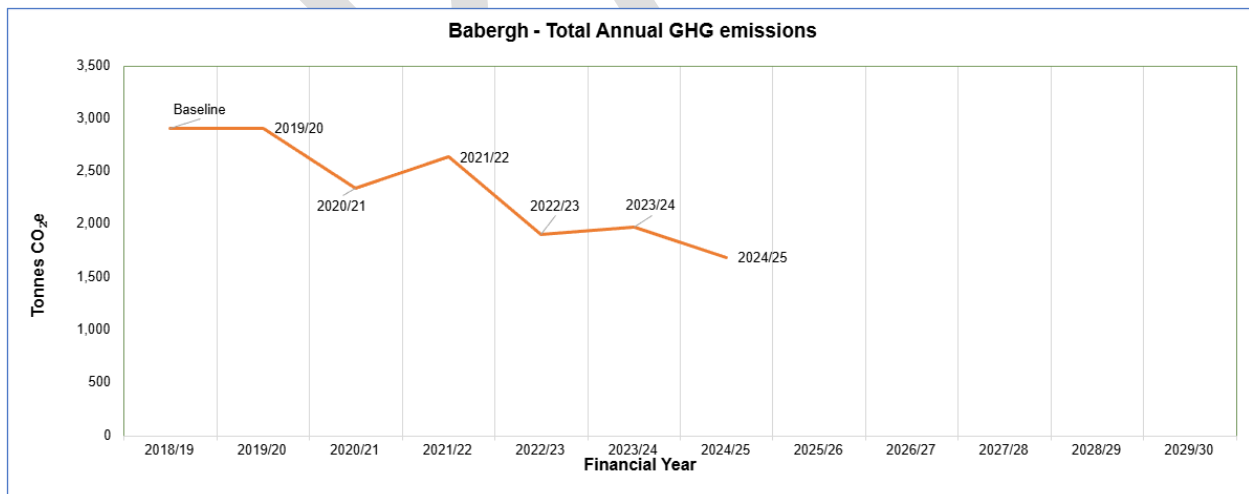
Our baseline emissions in 2018/19 were 2,907 tCO₂e and our most recent calculation 1,687 tCO₂e, a 42% reduction.

A theoretical 421t CO₂e reduction in emissions is needed in each of the remaining 4 years of our 2030 net zero target, however it is hard to approach targets with a simple linear reduction. The required interventions will vary in complexity, and some may require preparatory works in one year in readiness for the next. In addition, the most effective and cost-efficient time to undertake works is usually when an asset requires other work e.g. a gas boiler reaching end of life or roof requiring replacement.

There needs to be careful consideration of the costs versus the benefits and whether it is prudent to spend large sums of money on ageing assets, versus more beneficial interventions elsewhere.

Total figures for emissions do not always reflect progress straightforwardly. Totals for different sources will be impacted by how warm or cold seasons are relative to the previous year, changes in use of buildings and vehicles, expansion or removal of services, changes in carbon conversion factors and when missing data is incorporated.

Graphic 9: shows the progress we have made since 2018/19





4 CO2 mitigation

4.1 Solar Panel installations

In 2024/25, the solar panels across our estate that include leisure centres, depots and sheltered housing (but excludes those on individual dwellings), produced 403.45 MWh of electricity, mitigating 80.18 tCO₂e emissions when compared to the equivalent electricity if sourced from the national grid.

For the purposes of greenhouse gas reporting, the energy generated by social housing does not contribute to the Council's Net Zero trajectory. However, it does contribute to a reduction in emissions within the district and supports council tenants with the cost of electricity.

The solar systems on our individual housing dwellings are estimated to have produced over 2,000,000 kilowatt hours and saved 417 tCO₂e.

4.2 Electric Vehicle Chargepoints (EVCP)

We have 52 EVCPs distributed across the district in our car parks. The increased provision for drivers using battery vehicles is of course very welcome, although this will lead to an increase in electricity use that we are deemed to be responsible for. This increase is, however, decreasing the amount of tailpipe emissions and so overall, is a benefit to the wider community as it improves air quality and reduces net greenhouse gas emissions. All our electricity is purchased on a green tariff, meaning that the equivalent energy used is sourced from renewable generators.



5 Conclusion and next steps

This report highlights the progress of achieving carbon net zero for the council by 2030; an urgent goal that poses a substantial challenge. Substantial emissions reductions are required to meet the Net Zero target, with a significant dependency upon the ability to electrify heat and transport, whilst simultaneously ensuring there is a reduction in the emissions intensity of electricity the council uses.

Over the past year, Babergh has made progress; however, a few properties account for the main share of the emissions. These properties are more complex to decarbonise and any interventions require careful consideration alongside impacts upon service users, cooperation with operators, aligning to maintenance and other potential works required, and ensuring there are robust business cases to deliver the best value for money.

All service areas must be made aware of the energy used within their assets and take responsibility for reducing consumption, recognising their direct impact on the council's ability to reach net zero by 2030. As carbon emissions correlate to energy expenditure, cutting emissions benefit both the individual service areas and the council overall.

To ensure that the data is robust and as accurate as possible, it is essential that all service areas work collaboratively and are supported in taking ownership of their carbon emissions. Reducing carbon emissions is everyone's responsibility, and this has the added benefit of reducing long-term costs and delivering co-benefits. The council will continue to invest in improving the quality and quantity of data to inform more accurate reporting and in support of informing decisions to reduce emissions.

The council's Carbon Reduction Management Plan³ and the Annual Report provide context regarding work completed to date and what needs to be done now to enable action going forward.

³<https://baberghmidsuffolk.moderngov.co.uk/documents/s34078/Carbon%20Reduction%20Management%20Plan%20Narrative%202.pdf>



Appendix 1

Guidelines and data sources used to define the GHG reporting methodology:

- UK Government Conversion Factors for Company Reporting (2025) - DESNZ / DEFRA
- GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol Corporate Standard)

References

1. DBEIS / DEFRA, (2025), 'UK Government Conversion Factors for Company Reporting', Available at: [ghg-conversion-factors-2025-condensed-set.xlsx](#)
2. BMSDC Carbon Reduction Management Plan 26-28

Glossary

Air-source Heat Pump	ASHP
Carbon Dioxide Equivalent Tonnes	tCO ₂ e
Combined Heat and Power	CHP
Greenhouse Gas	GHG
Electric Vehicle	EV
Hydrotreated Vegetable Oil	HVO
Kilowatt Hour	kWh
Kilowatt Peak	kWp
Megawatt Hour	MWh
Global Warming Potential	GWP
Sheltered Housing Unit	SHU
Solar Photovoltaic	Solar PV
Methane	CH ₄



Nitrous Oxide	N2O
F-gas hydrofluorocarbon	CFC
F-gas perfluorocarbon	PFC
Sulphur hexafluoride	SF6

DRAFT