

Appendix 1

Carbon Management Action Plan Progress Update 2024/25

In 2024/25, the Council allocated in the region of £1.6m towards ten programme themes aimed at addressing the actions outlined in the Climate Change and Green Futures Strategy 2023-2027. This investment has been via two streams; the Council's general fund and external funding. The CMAP adopts a strategic approach to addressing the challenges posed by Climate Change, via a diverse range of programme themes.

Figure 1 shows progress made with the 88 actions contained within the 2024/25 CMAP.

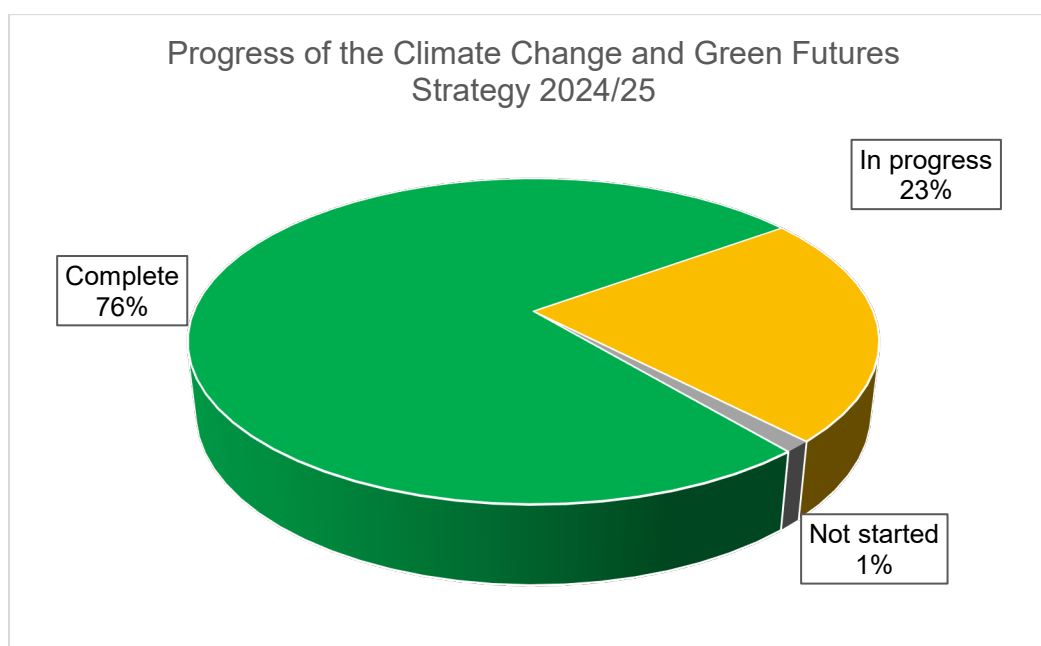


Figure 1 – Carbon Management Action Plan progress in 2024/25

To date:

- 67 actions complete.
- 20 actions in progress to be rolled over into 2025/26.
- One action has not been started. This has been summarised in **Table 1**.

	Theme	Action	Responsible Officer	Reason	Additional comments
1	Theme 6: Recycling and Resources	Investigate the use of carbon impact targets overweight based data for	Assistant Director of Environment	Not started. Simpler recycling and food waste collections are currently	This will be included in the 2025/26 CMAP.

	Theme	Action	Responsible Officer	Reason	Additional comments
		refuse and recycling.		the priority. These will have a positive impact on carbon reduction.	

Table 1 – Carbon Management Action Plan - actions for 2024/25 not started

Carbon Management Action Plan 2025/26

The Carbon Management Action Plan for 2025/26 consists of **114** actions, with 183 targets, of which.

- 52 are new.
- 62 have been reviewed from the previous year and rolled over to 2025/26.

The new actions are a result of increased engagement across the Council over the past year, involving Officers whose responsibilities include initiatives that have the potential to contribute to reducing carbon emissions.

The full Carbon Management Action Plan 2025/26 is presented as **Appendix 3**.

Broxtowe Borough emissions update

Emissions for the Borough for 2023 are due to be released at the end of June 2025. An intermediate report on the position of these can be provided to Cabinet later in the year. Emissions for 2022 can be seen within the Carbon Footprint Rebaselining including Scope 3 Emissions report presented to Cabinet on 3 September 2024.

The Council's Carbon Footprint 2024/25

The information in **Figure 2**, details a high-level breakdown of how the Council's own operational emissions (Scopes 1, 2 and some of Scope 3 (business travel and losses due to transmission and distribution)) have been produced during 2024/25.

Total emissions have reduced from 2,343 tCO₂e (2023/24) to 1,620 tCO₂e (2024/25), which is a 31% reduction, and a 57% reduction compared 2018/19.

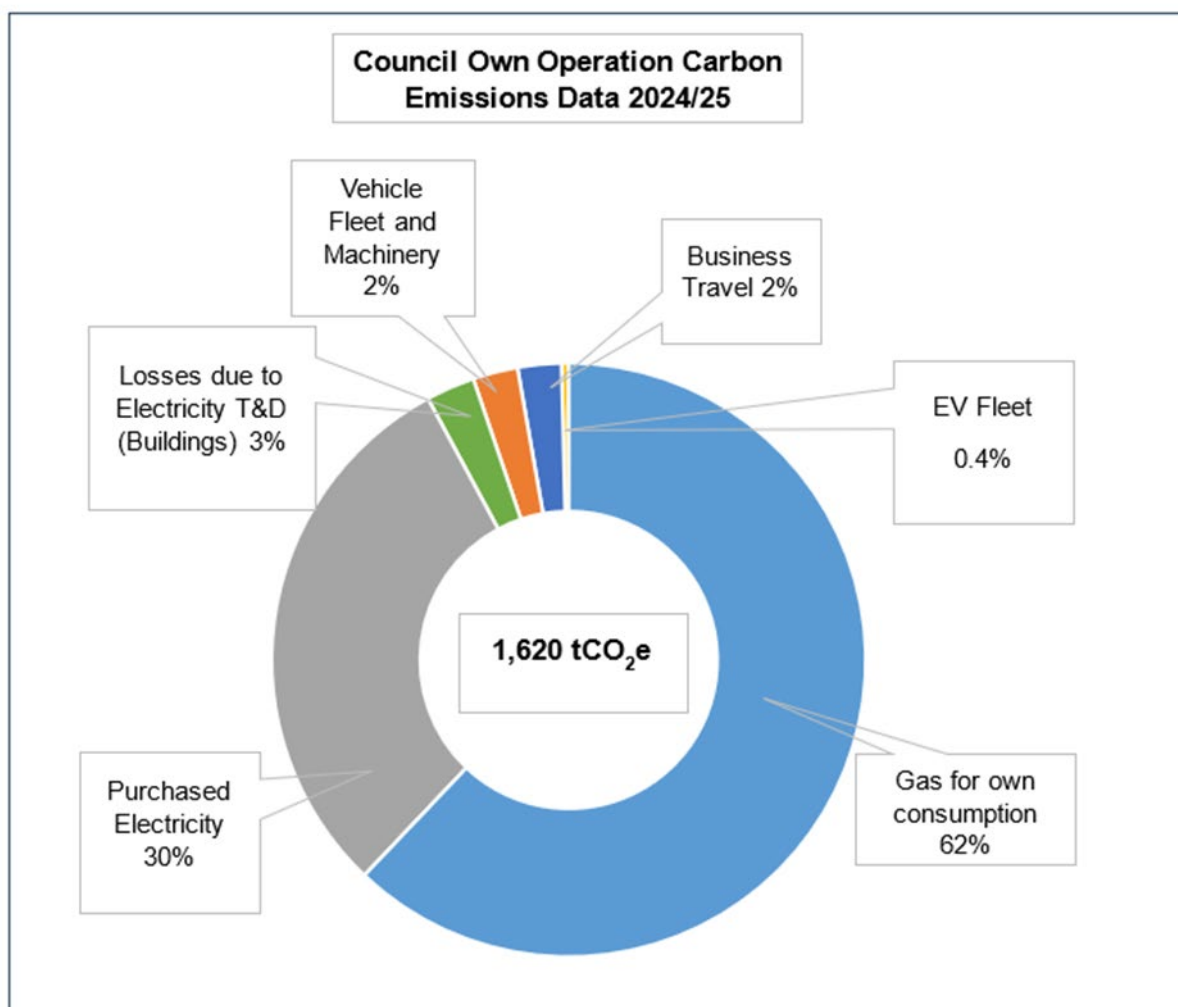


Figure 2 – Broxtowe Borough Council's Carbon Footprint 2024/25

The largest proportion of emissions for the Council continues to come from gas consumption making up 62% of the overall emissions. There was a 0.8% reduction compared to the previous year. This is then followed by purchased electricity, making up 30% of the emissions, which is a 13% increase compared to the previous year. A significant proportion of this increase is attributed to the Combined Heat and Power (CHP) unit at Bramcote Leisure Centre being out of operation for the majority of the reporting year, this has now been fixed **Table 2** summarises the emissions breakdown for the last two reporting years.

Emission	tCO ₂ e			
	2023/24	2024/25	Difference	
Gas for own consumption	1014	1,006	-1	↓
Vehicle Fleet and Machinery	812	40	-95	↓
Purchased Electricity	432	487	13	↑
EV fleet	5	6	27	↑
Business travel	43	39	-10	↓
Losses due to Electricity T&D (Buildings)	37	43	16	↑
Total	2343	1,620	-31	↓

Table 2 – Emission breakdown across 2023/24 and 2024/25

Following the transition to Hydrotreated Vegetable Oil (HVO) across the majority of the vehicle fleet in April 2024, emissions now account for 2% of the Council's overall footprint (this was 35% in 2023/24). A reduction of 95% across fleet emissions.

Progress towards carbon neutral 2027

The Council has committed to become carbon neutral by the 31 December 2027. As of the 1 July 2025, there are 913 days remaining to achieve this.

Figure 3 tracks the Council's progress up until 2024/25. The dotted trend line in green highlights the trajectory towards carbon neutrality based on current performance.

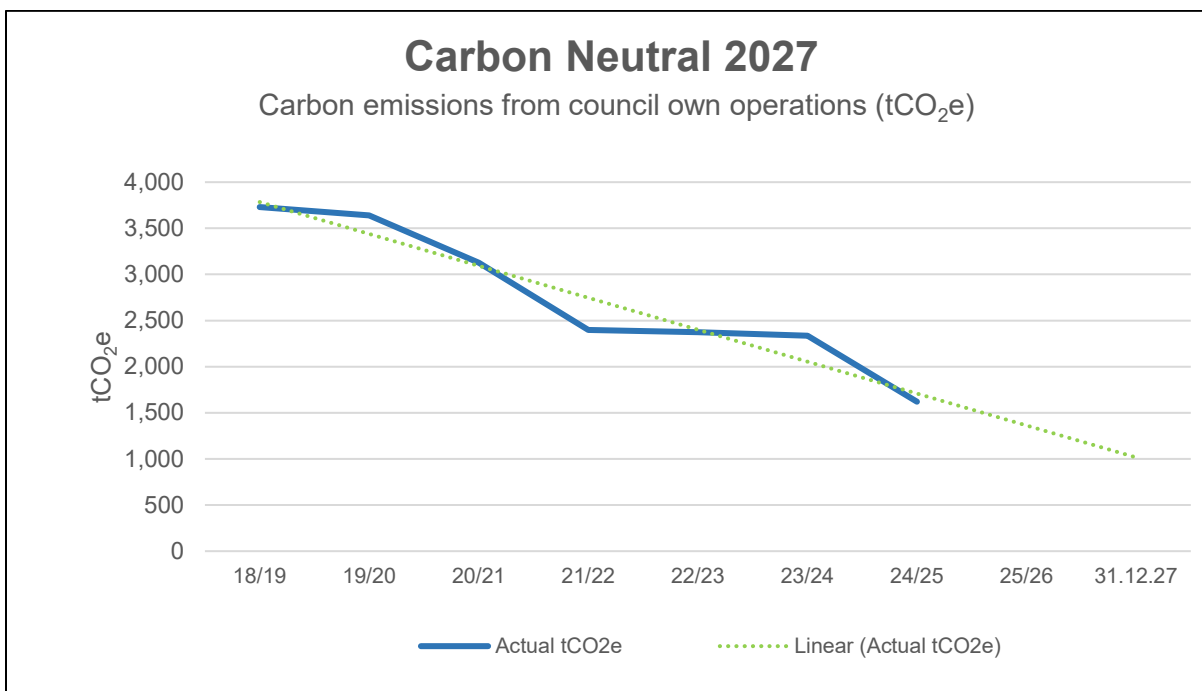


Figure 3 – progress towards carbon neutral 2027

Overall, progress in 2024/25 has been positive, particularly with the transition to HVO. However, the Council is not complacent, as there is some way to go before carbon neutrality is achieved. Moving forward there needs to be an increased focus on the estate, especially regarding energy efficiency measures, as well as addressing residual emissions that will need to be managed by the end of 2027. **Figure 3** highlights the effort needed to reach the carbon neutral target.

A summary of the Council's carbon footprint for 2024/25 is shown in **Figure 4**.

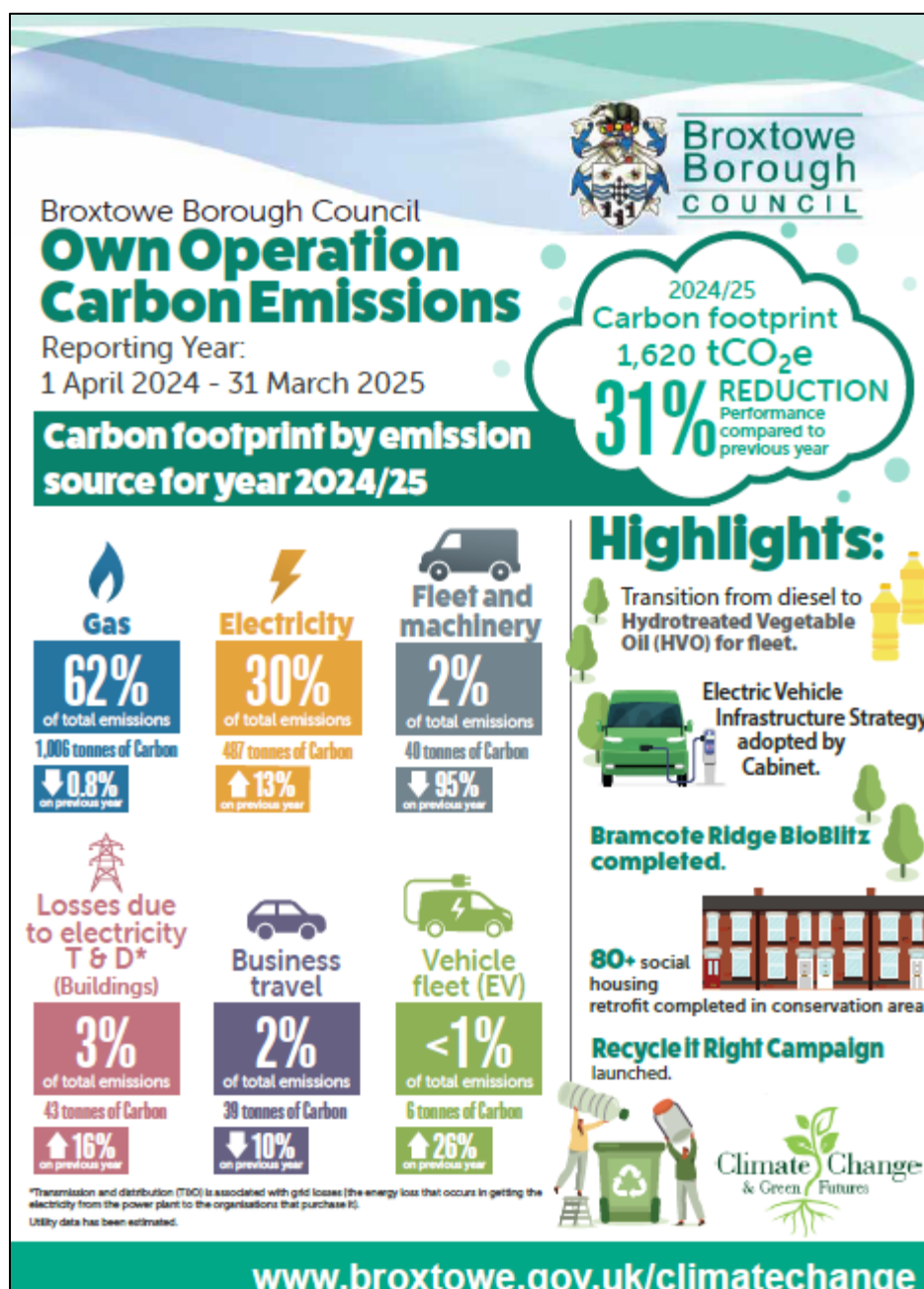


Figure 4 – A summary of the Council's carbon footprint for 2024/25

Residual emissions

Whilst the Council is implementing ambitious actions to reduce operational carbon emissions to as close to zero as possible, it is inevitable that residual emissions will remain. These are defined as the emissions that are difficult to avoid or difficult to fully eliminate due to technological, financial or other limitations. Such emissions will require to be balanced out through compensation mechanisms which may include both carbon sequestration (the process of capturing and storing atmospheric carbon using the

Council's own natural estate) and carbon offsetting (involving paying others to reduce or remove carbon emissions)

Residual emissions for the Council are anticipated to be from utilities, fleet and business travel. The Council does purchase electricity from a renewable (green) tariff; however, currently emissions are reported on a location-based basis, which calculates emissions using the average emission intensity of the power grid, regardless of the specific electricity contract held. This approach was adopted based on a recommendation from the Carbon Trust, to increase awareness of electricity usage and emphasise the importance of reducing consumption. Moving forward, the Council plans to adopt a market-based approach, which will accurately reflect emissions from the electricity purchased under the green tariff, thereby supporting efforts to reduce the Council's carbon footprint.

Work has also begun to understand the Council's own natural assets carbon sequestration value with basic calculations completed. However, the methodologies are yet to be officially confirmed and recognised.

During 2025/26, other options for residual emissions reduction will also be explored including further opportunities to decarbonise key operational buildings including the Council Offices and Bramcote Crematorium as well as ensuring new buildings are designed and built as energy efficient as possible within budget and using renewable energy to heat and power rather than gas. . This will include an investigation as to whether the implementation of ISO 14068-1: 2023, the first international standard for carbon neutrality, should be used.

It should be noted that actions to remove residual emissions also come with their own associated carbon emissions and costs.

Scope 3 emissions 2023/24

In 2024/25, the Carbon Trust was appointed to complete the first Scope 3 emissions baseline calculations for the Council. Data for 2022/23 was collated and used to complete these calculations. A report was presented to Cabinet on 3 September 2024, with the full analysis and recommendations provided.

The Carbon Trust calculated the Council's Scope 3 emission baseline at 20,673 tCO₂e. When combined with Scope 1 and Scope 2 emissions, the total footprint for 2022/23 was calculated at 22,901 tCO₂e. Scope 3 emissions accounted for 90% of the Council's overall carbon emissions. Whilst these figures can seem alarming, they are typical for organisations starting out on their Scope 3 emission benchmark.

Scope 3 emissions for 2023/24 have been calculated at 22,022 tCO₂e, an increase of 1,349 tCO₂e (7% increase). This is accounted for by an increase on purchased goods and services (PG&S) from 2,695 tCO₂e in 2022/23, to 6,162 tCO₂e in 2023/24.

Carbon emissions from PG&S are calculated based on spend (£) per category and therefore if spend for the year increases so do the carbon emissions. This method of

conversion is common practice particularly when detailed activity data is limited. It leverages pre-calculated emissions factors (often industry averages) to convert financial values into carbon dioxide equivalents (CO₂e). The outcome of a spend-based Scope 3 calculation offers a high-level overview of emissions which is useful for identifying environmental hotspots. Work will begin in 2025/26 to identify these hotspots and explore opportunities to obtain more accurate data from suppliers.

When combined with Scopes 1 and 2 the total carbon emissions from Council operations has been calculated at 24,285 tCO₂e for 2023/24, an increase of 6%, **Figure 5**.

As in 2022/23, Scope 3 emissions account for 90% of the total carbon footprint with Scope 1 making up 8% and Scope 2 emissions making up 2%.

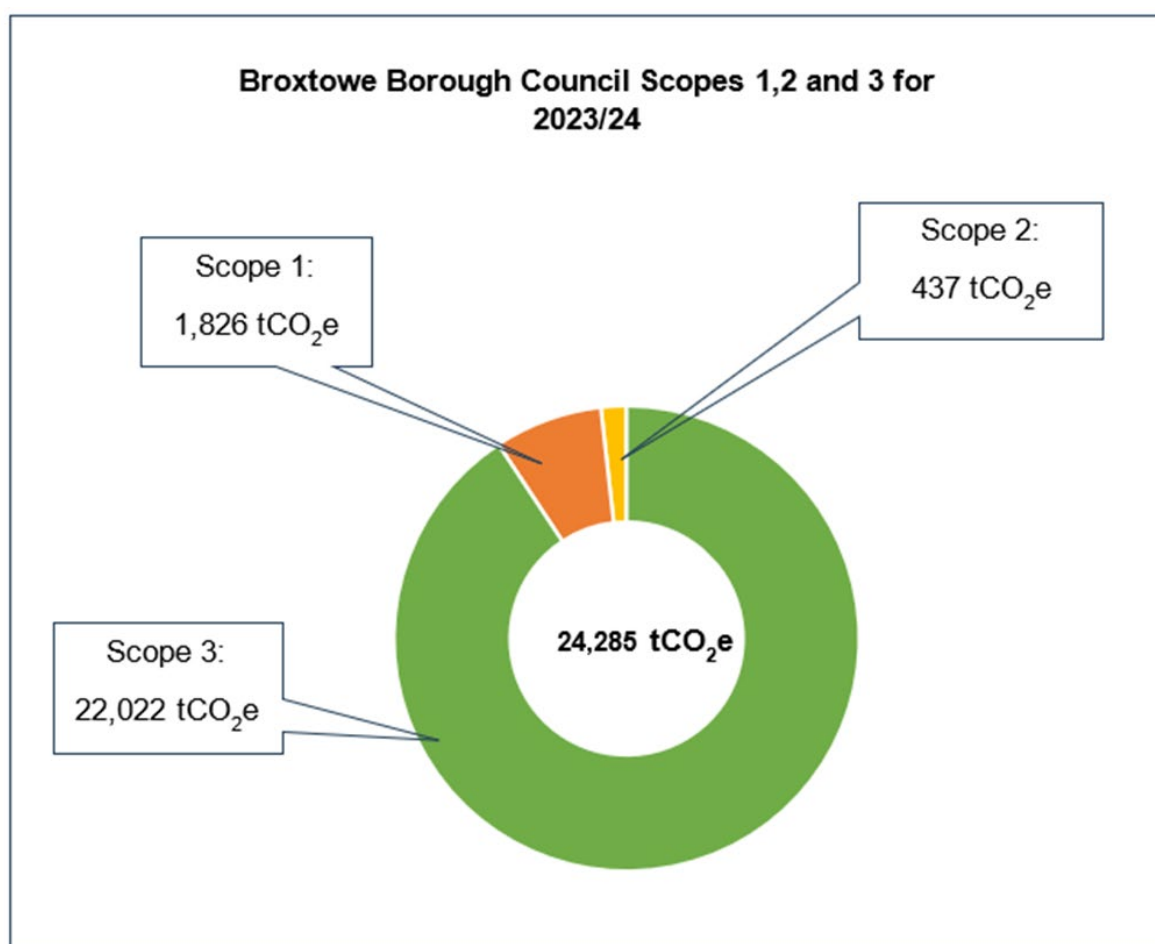


Figure 5 – Broxtowe Borough Council Scopes 1,2 and 3 for 2023/24.

The largest contributor to the Council's Scope 3 emissions is housing and commercial properties (71%), followed by purchased goods and services (PG&S) (28%), commuting

(1%), **Figure 6.** Water, business travel, working from home and waste all contribute less than 1%.

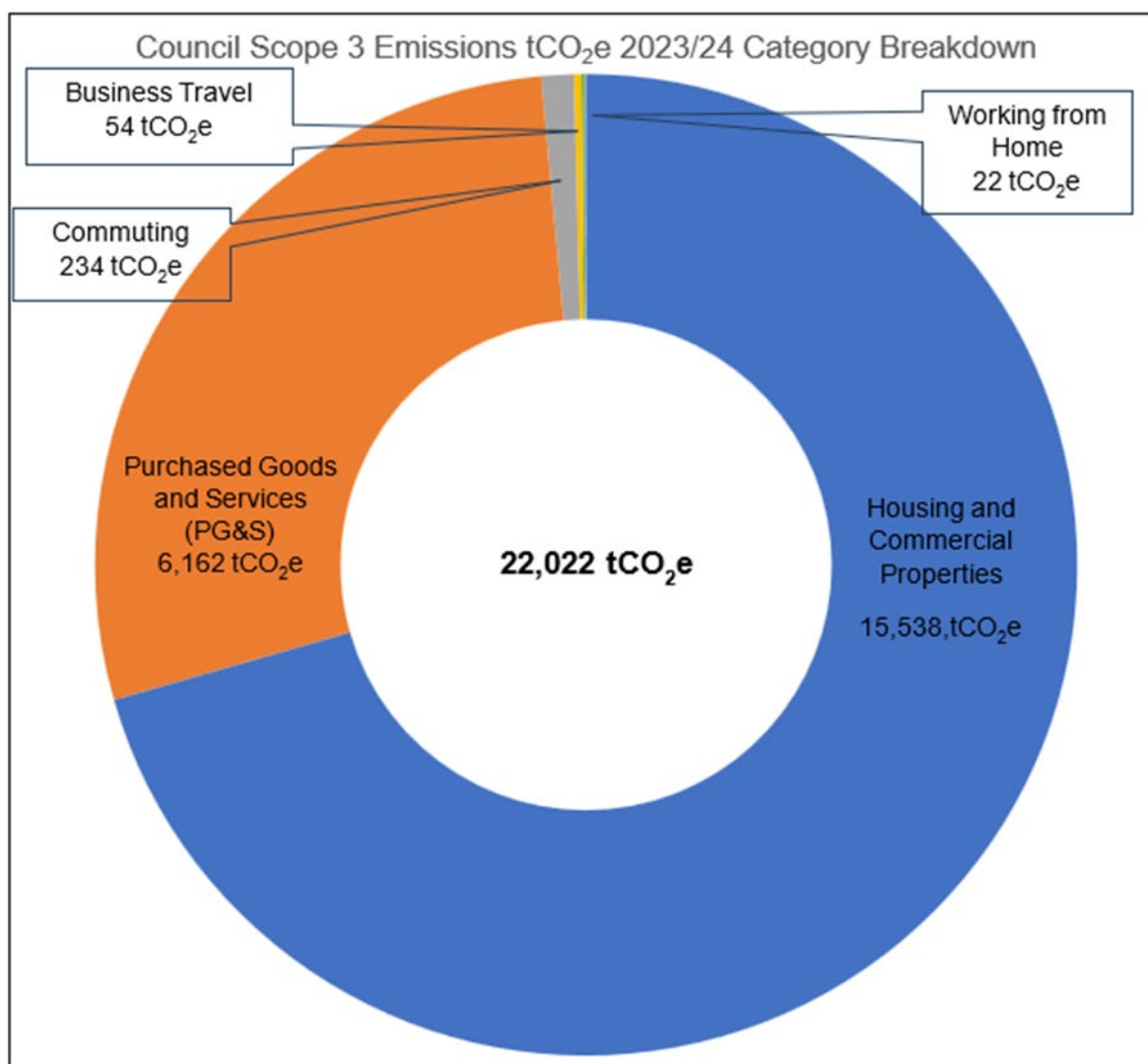


Figure 6 – Broxtowe Borough Council Scope 3 emissions category breakdown 2023/24

There are inherent estimations involved in calculating Scope 3 emissions, primarily due to the limited quality of the data available at this early stage. As data quality improves, confidence in these calculations will increase. Nonetheless, these estimates currently provide a valuable indication of the emissions, which is important as Scope 3 emissions are often the most challenging aspect to account for, as they fall out of the direct control of the Council. Understanding these emissions is essential for developing strategies to reduce our overall footprint.

Next steps

Calculations for Scope 3 2024/25 emissions will be reported to Cabinet in the Autumn of 2025/26.

Recommendations from the Carbon Trust report completed in 2024 will be reviewed, and opportunities will be identified and prioritised to support improvements in data quality and collection processes moving forwards.