

# Bromford Housing Group Half-Yearly Carbon Report 2024



Report prepared by Steve Bullock, BSc, GradiEMA

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## Contents

Executive Summary.....	3
Carbon Baseline .....	3
Baseline Data .....	3
Results.....	4
Scope 1, 2 and 3 emissions .....	5
Findings / recommendations .....	8
Conclusions .....	9
Appendices.....	10
Appendix 1 – Base Data .....	10
Appendix 2 – kWh for SECR .....	10

## Executive Summary

Bromford Housing Group is a housing association with almost 40,000 homes for which they have Decent Homes responsibility, spread across central and south-west England. Bromford are committed to providing safe, secure, and warm homes, but also care about the people who live in them. This carbon baseline assessment is a step towards becoming a more sustainable organisation.

Data was collected to reflect the performance across reporting period of 1<sup>st</sup> October 2023-30<sup>th</sup> September 2024. Carbon reporting is an important way to identify carbon reductions and explain and manage any unexpected trends. Accuracy in reporting will be imperative for future ESG requirements.

Bromford is working towards all its homes having a minimum EPC band C by 2030 and has commenced a programme of improvements to its existing homes to reduce carbon emissions and running costs for its customers.

88.4% of Bromford's homes are currently 'EPC C' (SAP 69) or above and the average SAP is 74.58. Emissions from Bromford's 39,877 homes (for which it has Decent Homes responsibility) far outweigh the company's operational emissions. Carbon emissions associated with Bromford's assets and operations are below:

- Total annual emissions accounted to 90,778.05 tonnes CO<sub>2</sub>e per annum.
- Of this total, housing stock emissions from Bromford's independently heated housing stock were estimated at 82,042.76 tonnes CO<sub>2</sub>e (excludes communally heated homes).
- Emissions from Independently heated homes are 2.06 tCO<sub>2</sub>e per home managed (from 2.08 tCO<sub>2</sub>e April 2024). This area should remain the focus of decarbonisation efforts, as managed homes account for 90.38% of Bromford's emissions.
- Bromford's total CO<sub>2</sub> emissions (scopes 1, 2 and 3) equate to 30.18 kg/CO<sub>2</sub>e per m<sup>2</sup> floorspace per year.
- Average SAP rating 74.58.

## Carbon Baseline

### Baseline Data

Base data for this project was collected by Bromford's Sustainability PM from relevant data owners across the company's directorates. These include Home Investment, Asset Management, Finance, Fleet and Offices and Operations. The data includes Scope 1 and 2 and relevant Scope 3 emissions.

To convert the data to CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions Defra conversion factors 2024 were used (to represent all carbon emissions in a standardised way).

The data used in the calculation is accurate at the time it was taken (end of September). Report timing is driven by the issue of Bromford's mid-year trading update. Some movement can be expected in the final mid-year number of homes figure, due to transactions in flight at the time of extraction. Such movements are immaterial to the overall accuracy of the calculation.

## Results

The Sankey diagram in Figure 1 shows all of Bromford’s carbon emissions and demonstrates just how much the housing stock impacts the overall emissions from the carbon audit. All figures in this diagram are in tonnes of CO<sub>2</sub> equivalent per year and have been rounded to nearest tonne.

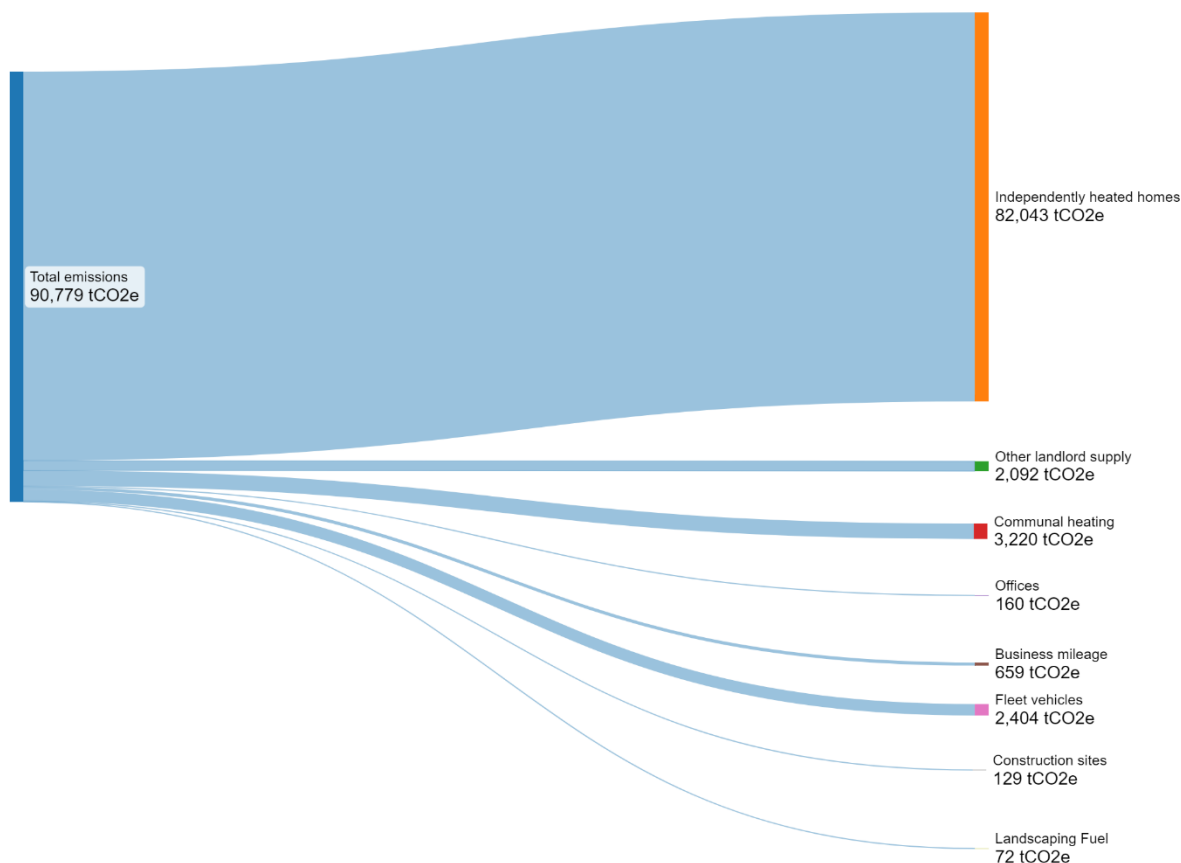


Figure 1. Sankey diagram providing a high-level overview of carbon emissions for the year 1<sup>st</sup> October 2023 – 30<sup>th</sup> September 2024. Electricity transmission and distribution (T&D) losses are included within the emissions totals, as per national reporting guidelines.

Bromford’s independently heated homes account for just over 90% of the organisation’s total emissions. At an estimated 82,042.76 tonnes CO<sub>2</sub>e per annum, it emphasises the importance of decarbonising housing stock. It is important to note that housing stock emissions account only for regulated energy use (from controlled and fixed services such as space and water heating, cooling, ventilation, fans, pumps and lighting). Unregulated energy use is building energy consumption resulting from a system or process that is not ‘controlled’ (e.g., cooking appliances, fridges, TVs, laptops, etc.) and is not included in this assessment. Housing stock emissions account for any homes for which Bromford has Decent Homes responsibility for. The remaining emissions include those related to offices, maintenance fleet, construction activities, business travel, electricity from communal areas and transmission and grid distribution losses.

A further breakdown of Bromford’s emissions excluding independently heated housing stock, is shown in the Sankey diagram, (figure 2). It shows operational energy usage breakdown amongst communal properties, maintenance, office activities, new build developments and travel.

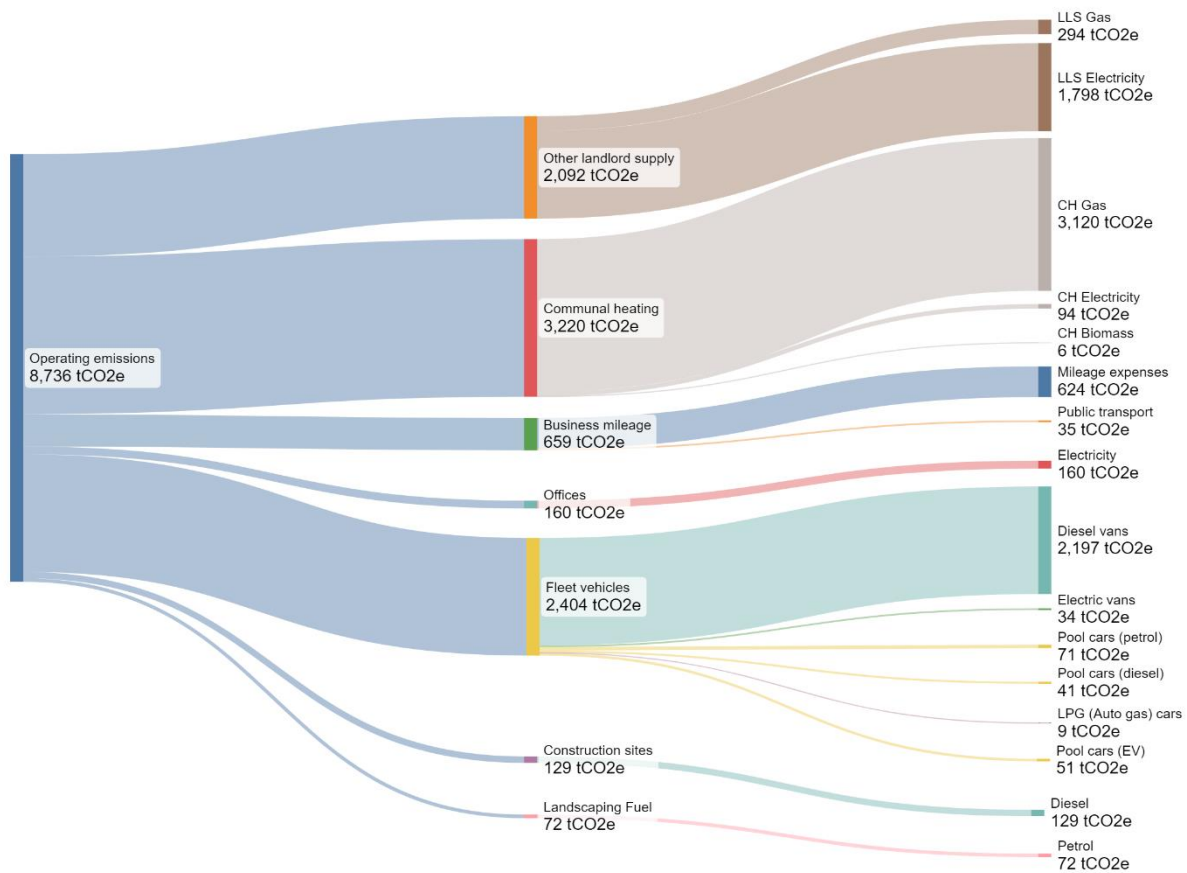


Figure 2. Sankey diagram of Bromford’s operational carbon emissions. Communal heating total does not include Franciscan View (captured in scope 3 independently heated home emissions).

### Scope 1, 2 and 3 emissions

Bromford Housing Group’s emissions have been reported in accordance with government recommendations, into categories of Scope 1, 2 and 3. A review of primary data submitted this year indicate Decent Homes Responsibility for 39,877 homes. This is an increase of 345 homes reported at financial year-end 2023-24.

- Scope 1 emissions are direct emissions which include emissions from activities owned or controlled by the organisation that release emissions into the atmosphere. This includes emissions from the combustion of gas, oil and other fuel.
- Scope 2 emissions are indirect emissions relating to the consumption of purchased electricity, heat, steam and cooling, and the associated emissions this releases into the atmosphere.
- Scope 3 (voluntary) emissions are other indirect emissions, which are a consequence of an organisations’ actions. These occur at sources which you do not fully control. Here we have covered housing stock, business mileage, transmission and distribution losses associated with electricity generation and public transport.

As Bromford Housing Group have previously reported their carbon emissions, most recently within their Year-End Carbon Footprint Report (1<sup>st</sup> April 2023 – 31<sup>st</sup> March 2024), the current reporting period carbon emissions are presented alongside the previous period to provide a comparison. All figures below are rounded to 2 decimal places.

**Global GHG emissions and energy use data for period 1<sup>st</sup> October 2023 – 30<sup>th</sup> September 2024**

	<b>Current reporting year 1<sup>st</sup> October 2023-30<sup>th</sup> September 2024</b>	<b>Comparison reporting year 1<sup>st</sup> April 2023-31<sup>st</sup> March 2024</b>
Scope 1 – direct emissions from gas, diesel and petrol directly purchased by Bromford Housing Group <sup>1</sup>	<b>5,939.33 tonnes CO<sub>2</sub>e</b>	<b>5,644.60 tonnes CO<sub>2</sub>e</b>
Scope 2 – indirect emissions from electricity purchased by Bromford Housing Group	<b>1,963.43 tonnes CO<sub>2</sub>e</b>	<b>1,759.50 tonnes CO<sub>2</sub>e</b>
Scope 3 – indirect emissions from Bromford Housing Group housing stock, business mileage, public transport usage and electricity T&D losses	<b>82,875.29 tonnes CO<sub>2</sub>e</b>	<b>83,098.14 tonnes CO<sub>2</sub>e</b>
<b>Total</b>	<b>90,778.05 tonnes CO<sub>2</sub>e</b>	<b>90,502.24 tonnes CO<sub>2</sub>e</b>

<sup>1</sup> Total includes SHIFT default gas/biomass usage where usage data was unavailable (110 gas, 30 biomass communally heated homes). Year end 2023/24 gas usage data was used at Abraham Fry House and Charles England House.

**Scope 1:**

	<b>Current reporting year 1<sup>st</sup> October 2023-30<sup>th</sup> September 2024</b>	<b>Comparison reporting year 1<sup>st</sup> April 2023-31<sup>st</sup> March 2024</b>
Emissions from gas used at offices	<b>0 tonnes CO<sub>2</sub>e</b>	<b>0 tonnes CO<sub>2</sub>e</b>
Emissions from gas used in “other landlord supply” areas (even if recharged to residents)	<b>293.52 tonnes CO<sub>2</sub>e</b>	<b>287.47 tonnes CO<sub>2</sub>e</b>
Emissions from gas bought for communal heating systems (even if recharged to residents) <sup>2</sup>	<b>3,120.47 tonnes CO<sub>2</sub>e</b>	<b>2,906.48 tonnes CO<sub>2</sub>e</b>
Emissions from the combustion of fuel used for fleet cars and vans	<b>2,318.50 tonnes CO<sub>2</sub>e</b>	<b>2,273.14 tonnes CO<sub>2</sub>e</b>
Emissions from the combustion of diesel (or other fossil fuels) used on construction sites	<b>128.59 tonnes CO<sub>2</sub>e</b>	<b>101.12 tonnes CO<sub>2</sub>e</b>
Emissions from Biomass bought for communal heating systems (even if recharged to residents) <sup>3</sup>	<b>6.01 tonnes CO<sub>2</sub>e</b>	<b>5.70 tonnes CO<sub>2</sub>e</b>
Emissions from the combustion from petrol fuel used in landscaping activities	<b>72.24 tonnes CO<sub>2</sub>e</b>	<b>70.69 tonnes CO<sub>2</sub>e</b>
<b>Total Scope 1</b>	<b>5,939.33 tonnes CO<sub>2</sub>e</b>	<b>5,644.60 tonnes CO<sub>2</sub>e</b>

**Scope 2:**

	<b>Current reporting year 1<sup>st</sup> April 2023-31<sup>st</sup> March 2024</b>	<b>Comparison reporting year 1<sup>st</sup> April 2023-31<sup>st</sup> March 2024</b>
Emissions from electricity used at offices	<b>146.89 tonnes CO<sub>2</sub>e</b>	<b>126.77 tonnes CO<sub>2</sub>e</b>
Emissions from electricity used in “other landlord supply” areas (even if recharged to residents)	<b>1,652.12 tonnes CO<sub>2</sub>e</b>	<b>1,550.77 tonnes CO<sub>2</sub>e</b>
Emissions from electricity used for communal heating systems (even if recharged to residents)	<b>85.96 tonnes CO<sub>2</sub>e</b>	<b>46.74 tonnes CO<sub>2</sub>e</b>
Emissions from electricity used for company EV’s (pool cars and fleet vans).	<b>78.46 tonnes CO<sub>2</sub>e</b>	<b>35.22 tonnes CO<sub>2</sub>e</b>
<b>Total Scope 2</b>	<b>1,963.43 tonnes CO<sub>2</sub>e</b>	<b>1,759.50 tonnes CO<sub>2</sub>e</b>

<sup>2</sup> Year end 2023/24 gas usage data was used at Abraham Fry House and Charles England House. SHIFT default gas usage where broker usage data was unavailable (110 homes).

<sup>3</sup> Data was not available for the quantities of biomass consumed, therefore the SHIFT default consumption 17,700 kWh per home was applied.

### Scope 3:

	Current reporting year 1 <sup>st</sup> April 2023-31 <sup>st</sup> March 2024	Comparison reporting year 1 <sup>st</sup> April 2023-31 <sup>st</sup> March 2024
Housing stock emissions	<b>82,042.76 tonnes CO<sub>2</sub>e</b>	<b>82,262.62 tonnes CO<sub>2</sub>e</b>
Emissions from business mileage (employee-owned cars)	<b>623.63 tonnes CO<sub>2</sub>e</b>	<b>674.66 tonnes CO<sub>2</sub>e</b>
Electricity T&D losses	<b>173.54 tonnes CO<sub>2</sub>e</b>	<b>152.23 tonnes CO<sub>2</sub>e</b>
Public transport mileage	<b>35.36 tonnes CO<sub>2</sub>e</b>	<b>8.63 tonnes CO<sub>2</sub>e</b>
<b>Total Scope 3</b>	<b>82,875.29 tonnes CO<sub>2</sub>e</b>	<b>83,098.14 tonnes CO<sub>2</sub>e</b>

### Findings / recommendations

- Bromford’s independently heated homes emissions reduced by 219.86 tonnes CO<sub>2</sub>e since the previous reporting period. This is despite 182 more independently heated homes assessed. This is equivalent to 2.06 tonnes CO<sub>2</sub> per home managed (from 2.08 tonnes CO<sub>2</sub> in the last reporting period).
- Bromford’s properties total floorspace amounted to 3,008,202.86 m<sup>2</sup>. This allowed the additional intensity ratio kgCO<sub>2</sub>/m<sup>2</sup>/year to be calculated which was 30.18 kgCO<sub>2</sub>/m<sup>2</sup>/year.
- Bromford’s average SAP is 74.58, (from 74.43 reported in April 2024). 88.4 of Bromford’s housing stock (for which they have Decent Homes Responsibility) is now ‘EPC C’ (SAP 69) or above. Improving the average SAP of Bromford’s housing stock will result in lower emissions and help align with net zero targets. Up-to-date SAP records will enable easy identification of homes to be the focus of retrofit plans for decarbonisation.
- There is a reported increase of scope 1 gas emissions from communal heating systems. This is due to 163 more homes communally listed as such within Bromford’s asset data. No data was available for blocks supplied “off contract”. SHIFT identified there were 110 fewer communally heated homes within Bromford’s broker data template compared with Bromford’s asset data. Therefore, the SHIFT default value for communally heated homes (17,700 kWh/home/year) has been used to represent regulated energy usage at these properties.
- This report has highlighted the need to investigate communal heating broker data, and to locate and report “off-contract” usage. This will avoid using SHIFT default assumptions for the 140-home difference between the asset data and the broker data (including Cross Street and Park Street). Sub-metering would be a way to assess the actual kWh demand of each communally heated property and help to distribute the cost to residents more fairly.
- Log vehicle details using office EV chargers and the usage in kWh. The majority of EV charging takes place at employee’s homes, but capturing office charging usage would complete the picture.
- Bromford may wish to consider switching to a renewable energy supplier as this may cut operational emissions and contribute to demand for renewable energy. However, it is



important to note that formal reporting requires standard conversion factors. The use of renewable tariffs can still be referenced as a footnote in any formal carbon reporting.

- Update asset data to reflect the fuel type used at Cross Street South and Park Street South (currently listed as biomass).

## Conclusions

- Bromford continue to improve the quality of their emissions data, which in turn will lead to greater confidence when comparing year-on-year emissions reduction performance.
- Total annual emissions accounted to 90,778.05 tonnes CO<sub>2</sub>e per annum, an increase of 275.79 tonnes CO<sub>2</sub>e since the previous reporting period. This rise is largely due to increased reported scope 1 gas emissions from communal heating systems. No data was available for blocks supplied “off contract”. Where gaps have been identified, the SHIFT default value for a communally heated home (17,700 kWh) has been used.
- Of this total, emissions from Bromford’s independently heated housing stock were estimated at 82,042.76 tonnes CO<sub>2</sub>e (excludes communally heated homes).
- Emissions from independently heated home are 2.06 tCO<sub>2</sub>e per home managed.
- Bromford’s total scope 1, 2 and 3 emissions equate to 30.18 kgCO<sub>2</sub>/m<sup>2</sup> floorspace/year.
- As independently heated homes account for 90.38% of emissions, it is recommended as a continued area of major focus for decarbonisation efforts.

## Appendices

### Appendix 1 – Base Data

See 'Bromford Half\_year CO2 Evidence pack 2024.xlsx' spreadsheet, sent with this report.

### Appendix 2 – kWh for SECR

The following figures are the mandatory kWh usage used to calculate emissions.

Energy consumption used to calculate emissions: /kWh [mandatory] – optional to provide separate figures for gas, electricity, transport fuel and other energy sources <sup>1</sup>	<b>Gas: 18,665,849.97 kWh</b> <b>Electricity 9,482,848 kWh</b> <b>Transport, landscaping and site fuel 14,385,506.04 kWh</b> <b>Biomass 531,00 kWh</b> <b>Total: 43,065,203.71 kWh</b>
Scope 1	Office gas: 0 kWh Other landlord supply gas: 1,604,788 kWh Communal heating gas: 17,061,062 kWh Fleet, landscaping and site fuel: 14,385,506 kWh Biomass 531,000 kWh <b>Total:</b> <b>33,582,356 kWh</b>
Scope 2	Office electricity: 709,428 kWh Other landlord supply electricity: 7,979,339 kWh Communal heating electricity: 415,147 kWh EV company pool vans electricity: 150,471 kWh EV Company pool cars: 228,463 kWh <b>Total: 9,482,848 kWh</b>

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- Related consultancy e.g. ESG and SECR reporting

Please be in touch for a free consultation on any of the above. Contact Richard on 07718 647117 or [richard@SHIFTenvironment.co.uk](mailto:richard@SHIFTenvironment.co.uk)

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