

London Borough of Bromley
Environment and Public Protection

Bromley CO₂ Emissions Report (2022)

CO₂ Emissions within the scope of the Borough

Published April 2025



Table of Contents

Summary Statistics:.....	2
Summary:.....	2
Data Sources and Methodology:	3
1.1. Historic and Current Data:	4
2.1. Domestic Emissions:	7
2.2. Domestic Emissions Initiatives:.....	10
2.3. Domestic Emissions and addressing fuel poverty nationally:	12
3.1. Transport Emissions:.....	13
3.2. Transport Emissions Reduction Initiatives:	15
4.1. Commercial and Industrial Emissions:	16
5.1: Other sector emissions:.....	17
6.1. Consumption-based emission Data (2021):	18
Glossary of terms:	21
Sources:	22
Appendices	24

Summary Statistics:

- 9.1% decrease in Borough-wide emissions from 2021 to 2022.
- 13.5% decrease in domestic emissions from 2021 to 2022.
- 3.1% decrease in transport emissions from 2021 to 2022.
- 11.5% decrease in commercial emissions 2021 to 2022.
- 3.1% increase in industrial emissions 2021 to 2022.
- Bromley has the 3rd highest consumption-based emissions per capita out of all of the London Boroughs in 2021.

Summary:

Whilst the London Borough of Bromley's (LBB) Net Zero Action Plan outlines our targets to reduce operational carbon emissions, it is important to understand the state of Bromley's borough-wide emissions. Local authorities are directly responsible for between 2-5% of their local area's emissions but can influence around 33% of emissions in their wider area through policy decisions, service provision, and occasional grants and funding opportunities.¹

Overall, there was a 9.1% decrease in borough-wide emissions from 2021 to 2022. The sector-by-sector breakdown of total emissions remains similar to 2021, with domestic emissions making up almost half (46%), transport at a third (33%), and all other sectors at 21%.

This report analyses carbon emissions and trends for the following sectors:

- Domestic
- Transport
- Commercial and industrial
- Other Sectors (Public, Waste, LULUCF, agriculture)

Bromley's per capita (per person) territorial emissions are lower than per capita for Greater London. However, for per capita (per person) consumption-based emissions for Bromley is the 3rd highest emissions out of the London Boroughs. This means that per capita emissions produced within Bromley's boundaries are less than the London borough average. However, including imports and subtracting exports, shows Bromley to have the 3rd highest emissions out of the London Boroughs. A graphic showing the differences between territorial and consumption-based emissions is in section 6.1 and a written explanation is included in the glossary of terms.

¹ Local Authorities and the 6th Carbon Budget – Committee Climate Change December 2020

Data Sources and Methodology:

The data for this report comes from three main sources and the dataset used is specified within each figure caption. The latest data, as of publication of this report, is 2022 for territorial and 2021 for consumption-based emissions. Territorial emissions are from the Department for Energy Security and Net Zero (DESNZ)², and the London Energy and Greenhouse Gas Inventory (LEGGI)³. The Consumption-based Emissions dataset⁴ for London is released by London Councils and their partners (Greater London Authority and the University of Leeds).

It is important to note that the methodology from the DESNZ data has been improved. Therefore, the emission levels (from DESNZ data) for 2005–2021 will differ from previous reports. Furthermore, the data in these reports relates to the calendar (rather than municipal) year and is expressed either as 'total' (the borough as a whole) or 'per capita' (average emissions per person) to provide a more meaningful comparison.

It should be noted that the emissions for LEGGI and DESNZ data (sections 1.1 to 5.1) have occurred within the UK's borders, (territorial emissions), and **do not** include the emissions from the purchase or consumption of products and goods manufactured from overseas. Whilst London Council's consumption-based emissions dataset has a methodology that is slightly different, it does give an indication that the UK's GHG consumption-based emissions are considerably higher than its territorial emissions. The differences between consumption-based emissions and territorial emissions are explained further at the start of section 6.1.

The LEGGI dataset is specifically used for Transport emissions (section 3.1) as the data has more specific detail relating to London wide data than DESNZ, such as the inclusion of electric railways. (London Atmospheric Emissions Inventory)⁵. The LEGGI and DESNZ dataset share most other sources of data such as domestic electricity. The DESNZ dataset is used in the other sections (1.1 to 4.1) to be able to compare with previous reports and to be consistent with other local authority reporting.

Greenhouse gas emissions (GHG) in line with the GHG protocol are reported in units of carbon dioxide equivalents (CO_{2e}) in all three datasets. This allows the impact of each of the three main greenhouse gases to be expressed in terms of the amount of CO₂ that would create the same amount of warming, allowing easy comparison of the impact of different emission types.² The GHG included are carbon dioxide, methane and nitrous oxide. Throughout this report, all greenhouse gas emissions are given in terms of kilotonnes of carbon dioxide equivalent (ktCO_{2e}).

² UK greenhouse gas emissions: local authority and regional - Department for Energy Security and Net Zero (DESNZ)

³ London Energy and Greenhouse Gas Inventory (LEGGI) - Greater London Authority (GLA)

⁴ Consumption-Based Emissions (CBEs) dataset for London – Greater London Authority (GLA)

⁵ London Atmospheric Emissions Inventory (LAEI) – GLA and TfL Air Quality

1.1. Historic and Current Data:

All sector emissions are shown in the Figure 1, and a short explanation of these categories is in Table 1 below.

Agriculture	Net Emissions (minus the CO ₂ sequestration from different sources) associated with agricultural practices which includes usage of electricity, gas, and off-road machinery. Also, methane from livestock and nitrous oxide releases from soils.
Commercial	Emissions that come from commercial businesses and their activities. E.g., gas and electricity usage.
Domestic	Emissions from domestic households. E.g., gas and electric
Industry	Emissions from electric, gas and GHG for industrial activities. For example, pollutants such as nitrogen oxide.
LULUCF (land use, land use change and forestry)	Net Emissions from land use change and forestry. For example, land being converted from grassland to forestry.
Public Sector	This includes emissions produced through properties via gas and electric, not only from the Local authorities but schools, NHS, Transport for London (TfL) etc.
Transport	Emissions resulting from road traffic, railways and aeroplanes. E.g., CO ₂ from combustion engines.
Waste Management	Emissions from waste (e.g., Methane from waste) as well as rubbish sent to the incinerator.

Table 1: Definitions and examples for sectors within the DESNZ dataset²

As mentioned in the 2021 report, 2021 data saw roughly a 6% uptick in emissions from 2020 levels and was most likely due to the end of COVID-19 lockdowns. As visualised in Figure 1, from 2021 to 2022 there has been a 9.1% decrease in borough-wide emissions. Overall, since 2005, Bromley has seen a trending decrease in CO_{2e} emissions, with an average annual 3% decrease in emissions since 2005.

Figure 1: LBB CO2 emissions (borough-wide) (DESNZ data)².

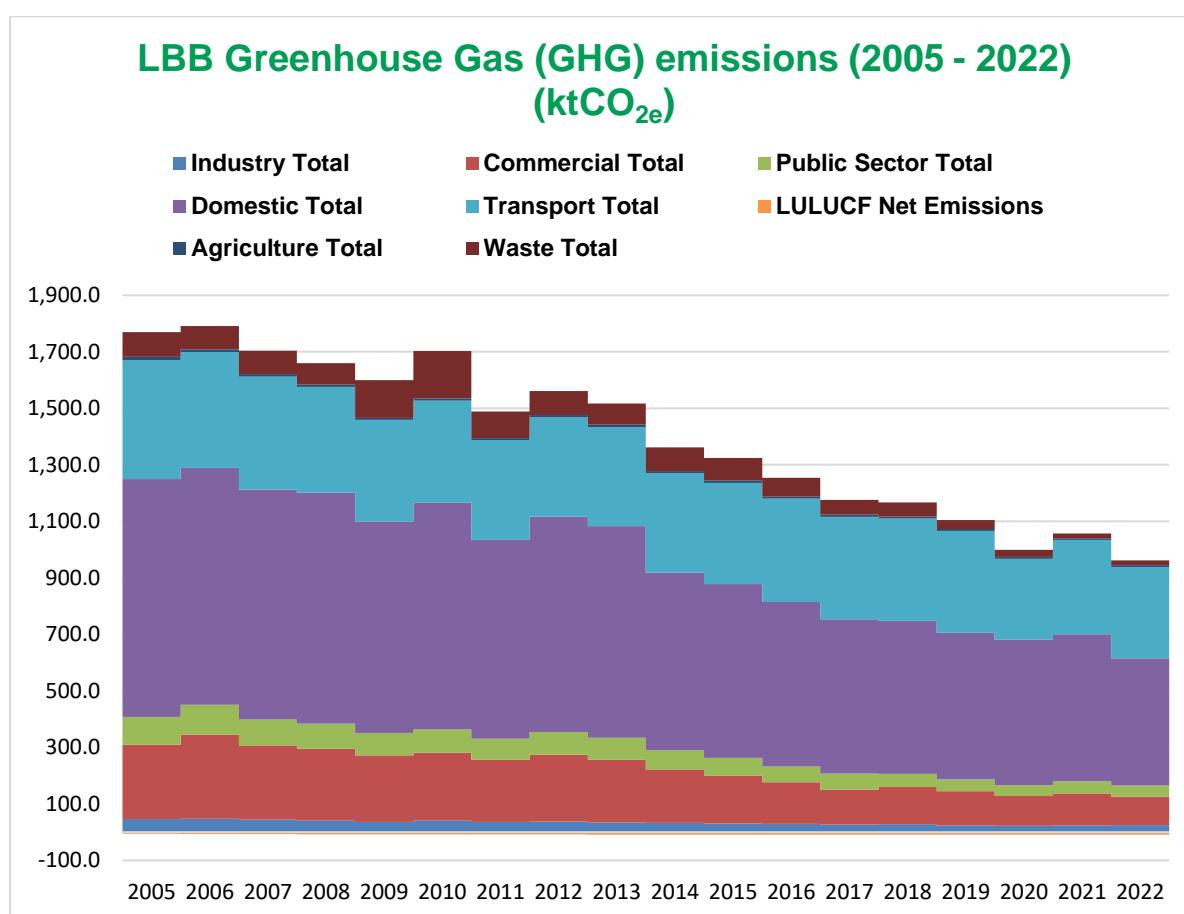


Figure 2 below, breaks down the emissions by sector for 2022. It shows that Domestic emissions make up almost half (46%) of borough-wide emissions, Transportation making up a third (33%) and all other sectors make up the remaining 21%.

This is a similar breakdown to the 2021 data, with Domestic falling from a share of 49% to 46% of total emissions, Transportation increasing from 31% to 33% of total emissions, and all other categories going from 20% to 21% of emissions. It is important to note that Transport emissions **did not** increase and fell from 334 ktCO_{2e} to 324 ktCO_{2e} (-3.1%). However, it fell less than the amount Domestic emissions fell by, which reduced by over 70 ktCO_{2e} (-13.5%). Consequently, Transportation increased its overall share of borough-wide emissions, (for comparison purposes Appendix A is a pie chart of 2021's emissions by sector, and Appendix B shows % change of all sectors 2021-22).

Figure 2: 2022 Bromley Emissions Per Sector (DESNZ data)²

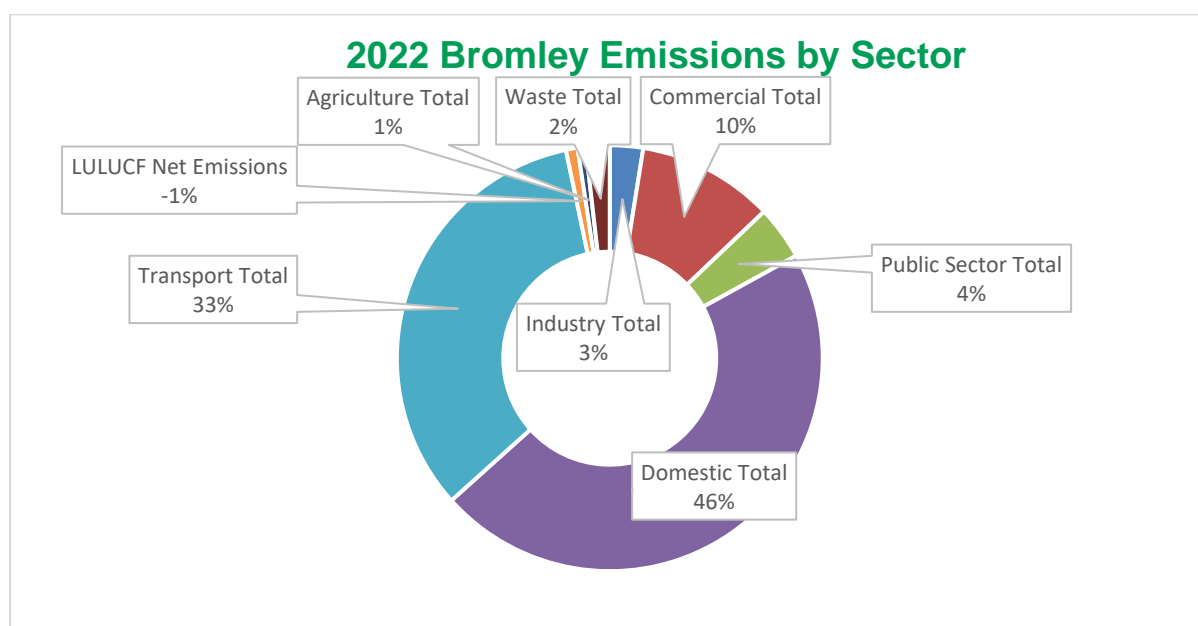
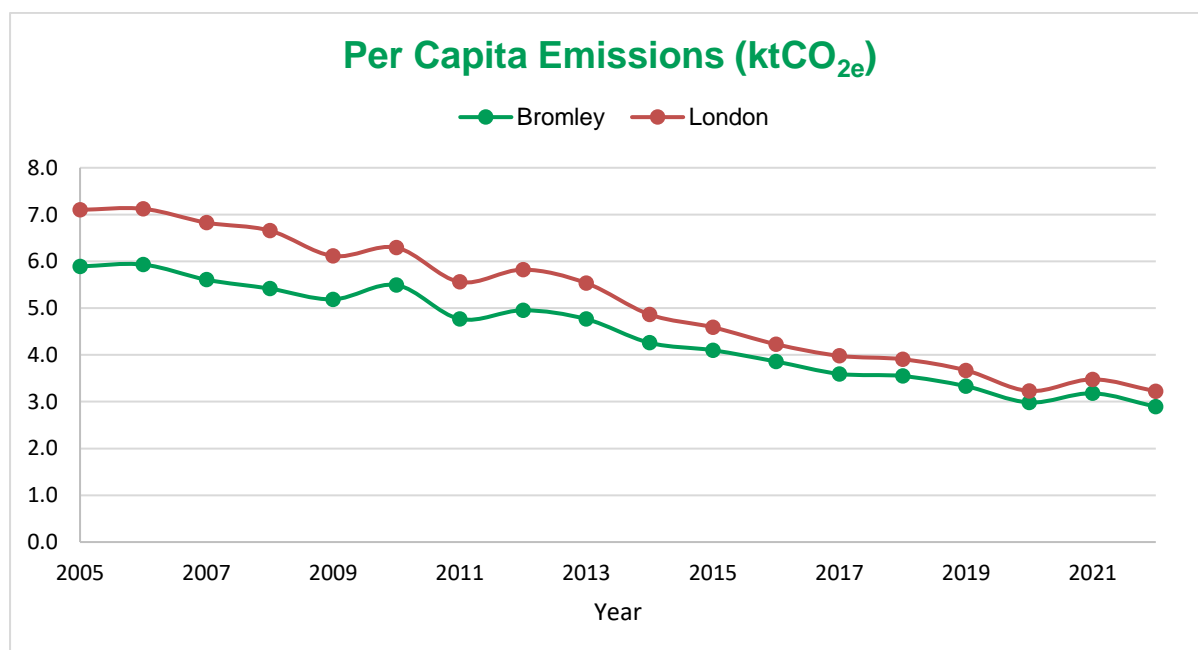


Figure 3 shows a comparison of per capita (per person) for territorial emission in ktCO_{2e} for Bromley and Greater London. This was calculated by dividing the total emissions of each year (for Bromley and London) by the population of that year (as provided by DESNZ). It shows that on average the borough-wide emissions per person is consistently less for Bromley than for London as a whole. However, the gap between the two has shrunk significantly since 2005.

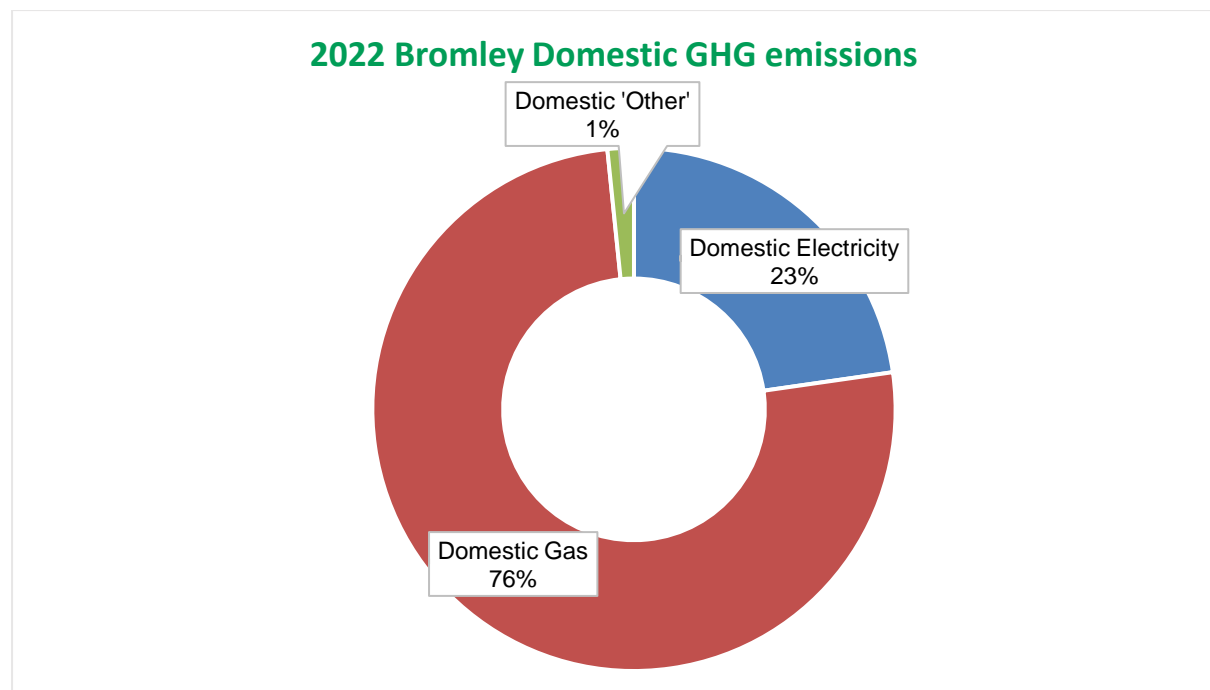
Figure 3: Per Capital Emissions Bromley Compared to London (DESNZ data)²



2.1. Domestic Emissions:

As highlighted in the previous section, Domestic emissions make up 46% of Bromley's GHG emissions (in 2022). This is much higher than the Greater London average of 33% (Appendix C shows emissions by sector (%) for Greater London). Figure 4 below shows the Domestic emission breakdown for Bromley. It highlights that domestic gas accounts for most Domestic emissions at 76%, while Domestic electricity contributes 23%.

Figure 4: 2022 Bromley Domestic GHG emissions (DESNZ data)²



Bromley is largely residential and is the largest London borough by area. The nature of housing stock, relative affluence of the population and age profile of the residents are also influences to consider.

Bromley has the largest elderly population of any London Borough. Typically, over 65's stays at home more than those in younger age categories and may live in under-occupied private housing. Some may also use heating for longer due to health concerns, resulting in more energy being used.

The Gross disposable individual income for Bromley is £29,032, which is much higher than the UK average of £20,435. Affluent households generally tend to spend more on energy.⁶

The Bromley Local Plan has a target to deliver 700 homes per year until 2030 including both private and social housing⁷. This initiative will provide the borough

⁶ Local indicators for Bromley (E09000006) – Office for National Statistics

⁷ The Bromley Local Plan – 2019

with more energy-efficient homes, as 84% of new builds nationwide achieved top energy efficiency bands of A or B in 2022.⁸

68% of housing in Bromley is owned (outright or through a mortgage), 13% of housing is socially rented, and 14% is privately rented.⁹ Bromley has a higher home ownership rate, and less rental properties compared to the rest of London. The responsibility for upgrading housing energy efficiency is usually the responsibility of the homeowner.

Improving the energy efficiency of the borough's housing stock will be essential to reducing energy bills, tackling fuel poverty, improving energy security, and reducing carbon emissions.¹⁰

Despite Bromley having high domestic emissions compared to the London average, there has been a substantial decrease in emissions since 2005. This is shown in Figure 5 below. As mentioned previously, from 2021 to 2022 saw a 13.5% decrease in total domestic emissions (the largest decrease out of all sectors) and 70 ktCO_{2e} in absolute terms. However, it is important to note the significant challenge to achieving net zero, given the 450 KtCO_{2e} equivalent of annual emissions in 2022.

Figure 5: Bromley Domestic Emissions 2005 – 2022 (DESNZ)²

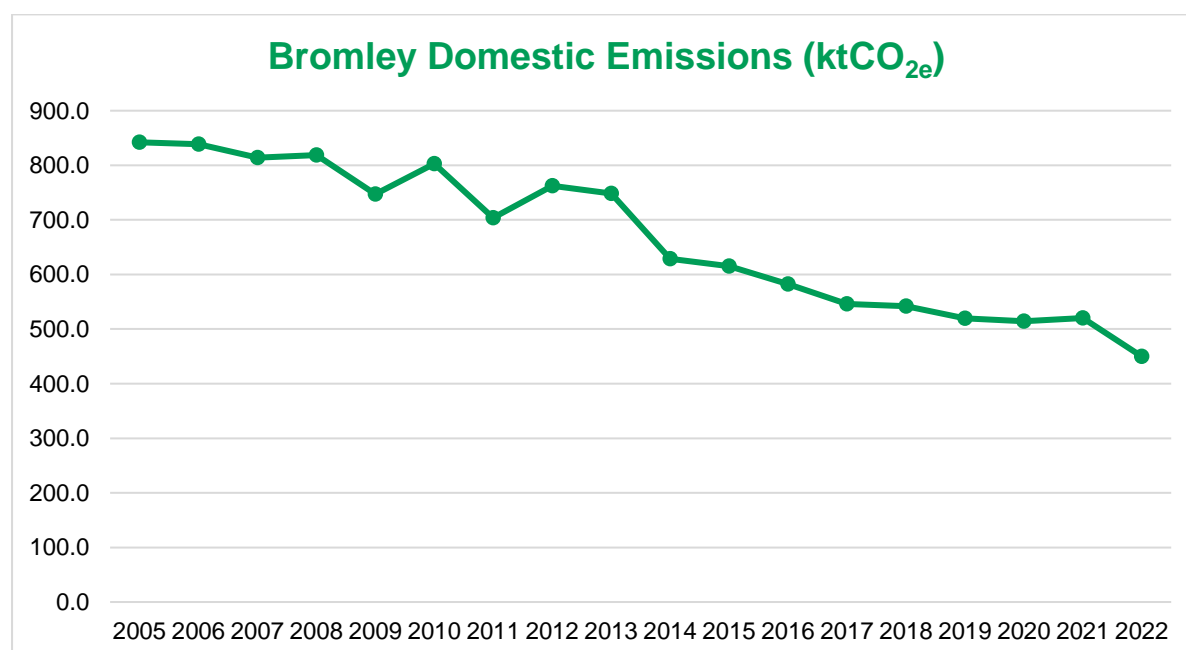


Figure 6 below highlights the absolute and percentage changes for domestic electricity, gas, other, and Domestic total (2021 to 2022). The largest percentage decrease was to Domestic gas at 14.5% and second was Domestic Electricity at 10.9%.

⁸ Energy efficiency: what you need to know, Department for Business, Energy and Industrial Strategy,

⁹ London Borough of Bromley Housing Strategy 2019 – 2029

¹⁰ Energy Efficiency: Building towards Net Zero, House of Commons, 2017-2019.

One reason behind this could be because of the substantial increase in energy prices from 2021 to 2022. There was a 95% average increase in UK household gas bills (or a £983 increase) and a 59% average increase to UK Household electricity bills (£553 increase).¹¹ This could potentially explain the sharp decrease in electricity and gas GHG emissions due to decreased usage by residents and businesses.

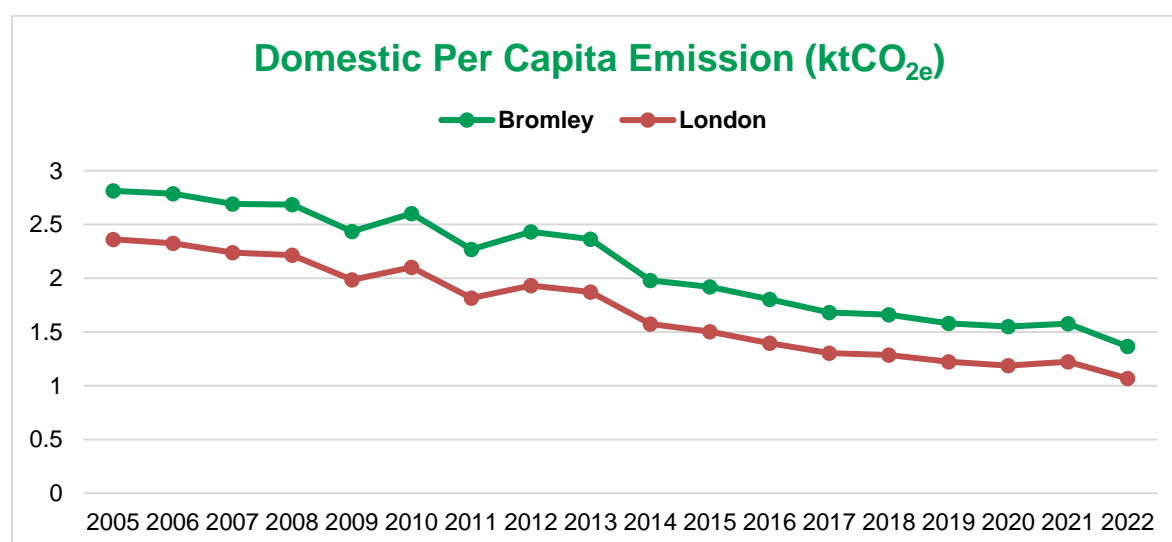
Despite this, the DESZN and ONS data for Bromley shows a decrease in fuel poverty levels between 2021 to 2022 (from 9.9% to 8.8%).^{12,13} Also, it is noteworthy that Bromley has an aging population with 18% of the population aged 65+ and this is predicted to increase to 19% by 2027.⁶

Figure 6: Domestic Emissions 2021 to 2022 (KtCO_{2e}) and Percentage change between the years (KtCO_{2e}).¹

Year	Domestic Electricity	Domestic Gas	Domestic 'Other'	Domestic Total
2021	114.7	397.9	7.4	520.1
2022	102.2	340.3	7.3	449.8
% change	-10.9	-14.5	-1.4	-13.5

Figure 7 below, shows that per capita (per person) Domestic emissions is consistently higher for Bromley than for Greater London. This is a better representation of emissions of residents and specifically households (gas and electricity usage). However, it does not include imported goods that come from outside the borough, for example from food. Emissions from goods used in Bromley is in the consumption data, and this is explored later.

Figure 7: Per Capita Domestic Emissions Bromley compared to Greater London (DESZN)²



¹¹ Quarterly Energy Prices, 22 December 2022, Department for Business, Energy & Industrial Strategy

¹² Sub-regional Fuel Poverty England 2024 (2022 data), Department for Energy Security and Net Zero

¹³ Sub-regional Fuel Poverty England 2023 (2021 data), Department for Energy Security and Net Zero

2.2. Domestic Emissions Initiatives:

Further reductions will be required if the national target of net zero by 2050 is to be met. However, reducing domestic emissions is challenging due to the lack of funding available for this area and a lack of any specific statutory requirements for property owners to attain or meet specific standards in this respect. This has, however, changed for the private rented sector, from April 2023 properties are required to reach a Minimum Energy Efficiency Standard (MEES), stipulated by an Energy Performance Certificate (EPC)¹⁴.

Enforcement of the MEES on the private rented sector is a responsibility of the Local Authority and sector compliance is largely dependent upon resources made available. This may change as regional schemes attempt to tackle issues of fuel poverty and climate change.

The initiatives underway that may help residents to better heat their homes and reduce domestic emissions include:

- Signposting residents to energy efficiency advice through the London Borough of Bromley website.

On the London Borough of Bromley webpage, residents are signposted to relevant energy advice platforms such as:

Energy Advice London - Energy Saving Trust
Gov.uk website
Ofgem

- Signposting residents to energy upgrade grants

Where grants are available, the London Borough of Bromley webpage also signposts grants and eligibility requirements for residents. As of the time of this report, some of the grants that may be available to eligible residents are:

- Warm Homes: Local Grant:¹⁵

The council, in 2025, has joined the London Borough-wide Consortium bid for 'Warm Homes' Local Grant funding, headed by Greater London Authority. The grant aims to improve the energy efficiency of private homes. For households to be eligible, they must meet one of the three eligibility pathways outlined by OFGEM; an Energy Performance Certificate (EPC) rating of D or below, low incomes and be privately rented or owned. The current estimate for homes in the London Borough of Bromley eligible is 381¹⁶. There are two categories of measures that can be implemented, such as energy insulation, and low carbon heat i.e. air source heat pumps.

- Boiler Upgrade Scheme¹⁷

¹⁴ Landlords: how to make your property more energy efficient – Energy Savings Trust (Blog post 13 March 2025)

¹⁵ Warm Homes: Local Grant – Department for Energy Security and Net Zero

¹⁶ Buro Happold 2024 assessment of private and private rented homes eligibility requirement

¹⁷ Apply for the Boiler Upgrade Scheme, gov.uk

The Boiler Upgrade Scheme provides up to £7500 towards the cost of replacing fossil fuel heating systems with a heat pump. Approved installers will apply for the scheme on residents' behalf.

- Great British Insulation Scheme:¹⁸

This is a government scheme that provides cheaper or free insulation for residents, if they meet certain criteria. Homes must have an EPC of D to G and be in a Council tax bracket A to D. The scheme offers cavity wall insulation or loft insulation.

- The Energy Company Obligation Scheme:¹⁹

This is specifically for lower income households. Applicants could be eligible if they either claim benefits and live in private housing or live in social housing. There are specific EPC requirements for this scheme and residents might be helped with cost of insulation work or replacing/ repairing their boiler.

- Signposting small, medium enterprises (SMEs) and landlords to available energy efficiency funding.

Where available, the LBB website also lists available grants to landlords looking to add energy efficiency improvements to their property. Landlords are also encouraged to apply where their tenants may meet certain eligibility requirements for example, income thresholds.

- Advice service platforms:

- South London Healthy Homes

The South London Healthy Homes program is a free service accessible to Bromley residents along with 12 other London boroughs to help vulnerable residents stay warm and healthy. Anyone eligible can access help to keep their home warm in the winter including energy efficiency advice, installation of energy saving devices and support for home improvement grants. The telephone advice service is facilitated by Charlton Athletic Football Club (CACT).

- South East London Community Energy partnership (SELCE)

SELCE offers energy advice for residents in South London. SELCE delivers a diverse set of services such as 1:1 phone advice, drop-in energy cafes, community workshops as well as home visits where necessary. Residents can self-refer to SELCE or be referred by colleagues.

- Energy Saving Trust:

The Energy Saving Trust gives advice to householders to make better energy choices. This includes advice on draught-proofing, insulation, and where to look for financial support.

¹⁸ Apply for support from the Great British Insulation Scheme, gov.uk

¹⁹ Help from your energy supplier: the Energy Company Obligation, gov.uk

2.3. Domestic Emissions and addressing fuel poverty nationally:

- Winter Fuel Payments

The Winter Fuel Payment is a tax-free annual payment to help older people meet the cost of their fuel bills. There was a total of 55,144 Winter Fuel Payment recipients in Bromley between 2022 and 2023 an increase of 314 residents from the previous year.²⁰

- Cold weather payments

Cold Weather Payments are made from the Social Fund to certain recipients of Income Support, income-based Jobseeker's allowance, and Pension Credit etc. To 'trigger' the payments, the average temperature at a specified weather station must be recorded as, or forecast to be, 0 degrees Celsius for seven consecutive days. These payments will vary in frequency, depending on the severity of the winter.

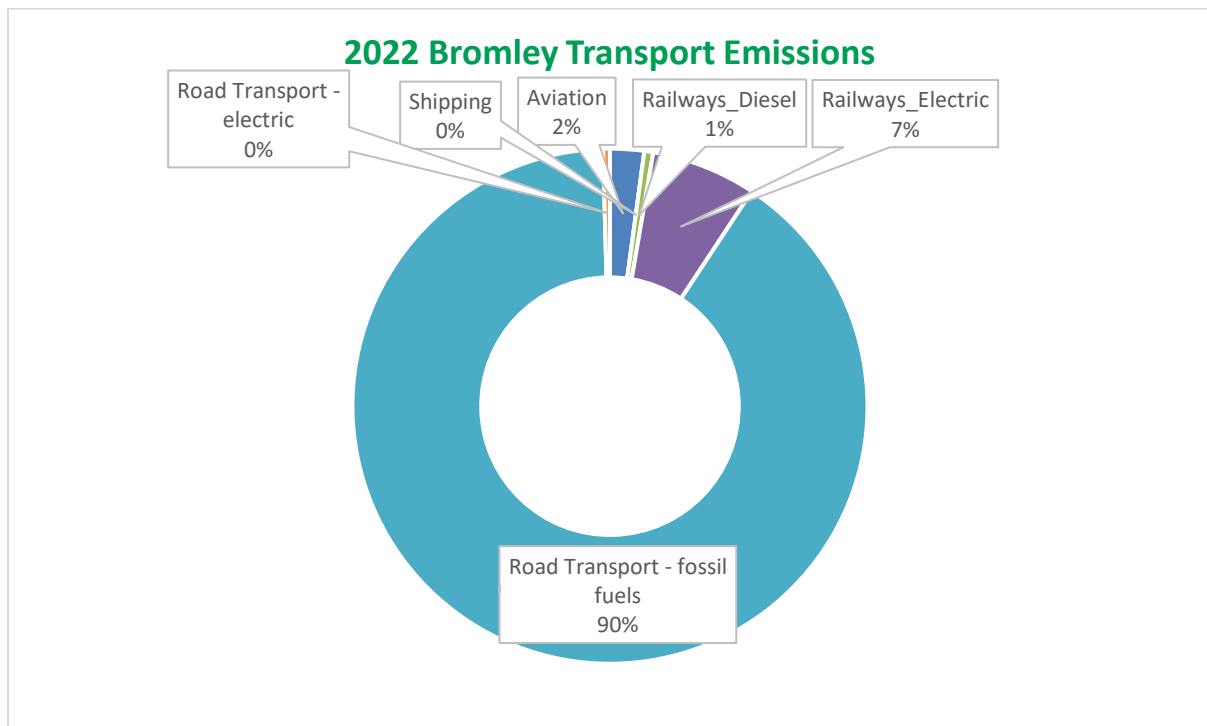
²⁰ Winter Fuel Payment statistics, Great Britain: Winter 2022 to 2023, Department for Work and Pensions (DWP)

3.1. Transport Emissions:

Transportation is responsible for 33% of Borough-wide emissions in 2022, whereas nationally transportation is responsible for only 28% of total UK emissions.²¹ Both for Bromley and nationally, transportation has grown as a % of total emissions.²²

Figure 8 below shows the transport emissions for Bromley in 2022. Of all transport emissions, road travel makes up most of the emissions for the Borough at 90%. Furthermore, (available in appendix E) Bromley has higher per person transport emissions than Greater London in 2022.

Figure 8: Bromley's 2022 Transport Emissions from London Energy and Greenhouse Gas Inventory (LEGGI 2022)³ data

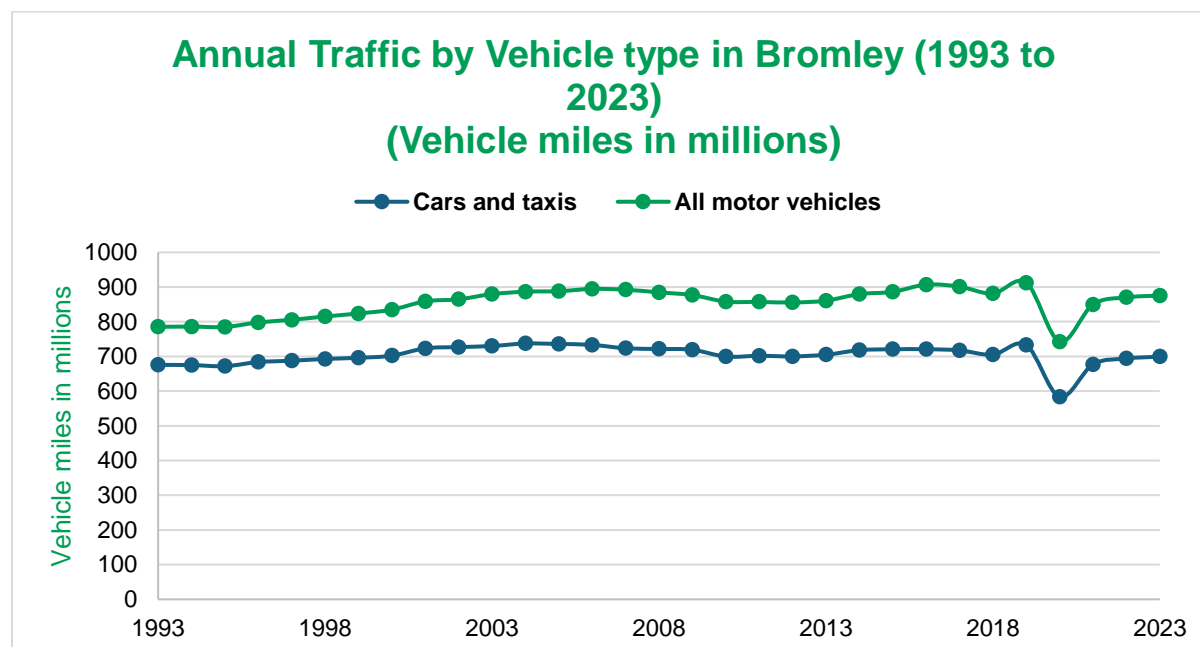


²¹ Greenhouse gas emissions from transport in 2022, Department for Transport, Published 12 December 2024

²² Transport and environment statistics: 2022, Department for Transport, Published 19 October 2023

As shown in Figure 9, Bromley has had a slight uptick in vehicle traffic from 2022 to 2023, but this is still lower than pre-pandemic levels. As seen below, most of Bromley's Road transport comes from cars and taxis in 2023 and previous years (making up 700 out of 875 million vehicle miles).

Figure 9: 1993 - 2023 Annual traffic by vehicle type in Bromley (Vehicle miles in millions)¹³



Bromley is the largest London borough in terms of area, and has 915 km of roads, resulting in Bromley residents having the longest average, and the longest total, journey length compared with other London boroughs.²³

In 2022/2023, 83% of Bromley households have access to a car, compared to 56% of inner London households and 77% of outer London households.²⁴

Apart from the Bromley town centre, public transport accessibility levels are relatively low, particularly for orbital journeys. Bromley lacks a secondary public transport network, with no underground or Docklands Light Railway (DLR) service and limited access to London Tram services. There is some orbital accessibility provided by the 'Superloop' which connects Bromley to Croydon and Bexley.²⁵ Public Transport Access Levels map for 2019 is shown in appendix F, which shows a heatmap corresponding to public transport access.

²³ Road length statistics (RDL), Department for Transport, 5 July 2018

²⁴ TfL London Car Ownership 2022-23 FOI, Published 15 July 2024, tfl.gov.uk

²⁵ Article: The Superloop: connecting outer London boroughs, more quickly, [London.gov.uk](https://london.gov.uk)

3.2. Transport Emissions Reduction Initiatives:

Reducing road transport emissions in Bromley is more challenging and will require infrastructure and travel behaviour changes.

The council encourages residents to make choices towards sustainable travel. Measures include:

- School and workplace travel plans

LBB's school travel team works with most schools in Bromley to support them to develop a school travel plan. The main objectives of a school travel plan are to promote active travel, reduce congestion and improve safety outside schools.

- Cycling

There are over 100 miles of cycle routes in Bromley which have been installed to make it easier to cycle. Cycle routes vary from off road to residential and high street cycle routes. There are also several footways converted to accommodate pedestrians and cyclists, with clear signage. The LBB website signposts residents to resources encouraging safe active travel.

- Electric Vehicles

The UK governments target to end the sale of new petrol and diesel vehicles has been pushed back from 2030 to 2035²⁶.

Fleet directly operated by the Council comprises of light vehicles, minibuses, and several pool cars. Our gritters are owned by the Council but operated by our contractor as part of a Highways contract.

Other activities relating to reducing emissions from cars include:

- Anti-idling campaigns
- Increasing the availability of electric vehicle charge points and the trialling of the Gul-e solution, by providing a secure cable gully fitted into the pavement to enable EV charging while removing potential pedestrian trip hazards. There are currently 12 Gul-e connections in the Borough with more connections planned.

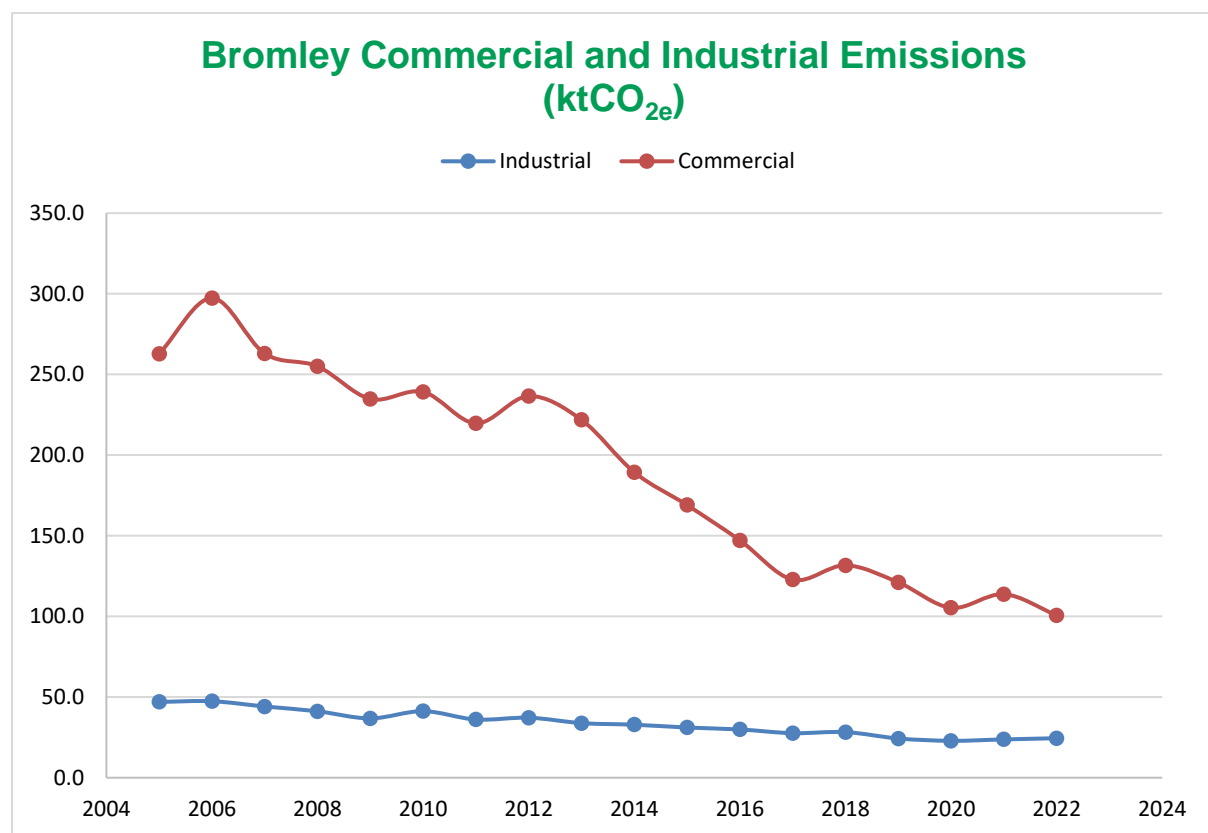
²⁶ UK electric vehicle infrastructure strategy - GOV.UK

4.1. Commercial and Industrial Emissions:

Commercial and Industrial emissions make up a collective 13% of Bromley's GHG emissions in 2022. Commercial emissions had a 11.5% decrease from 2021 to 2022 whereas Industry increased by 3.1%. As shown in Figure 10, Commercial emissions have reduced dramatically since 2004, and Industrial emissions remained much lower but has decreased at a much slower rate.

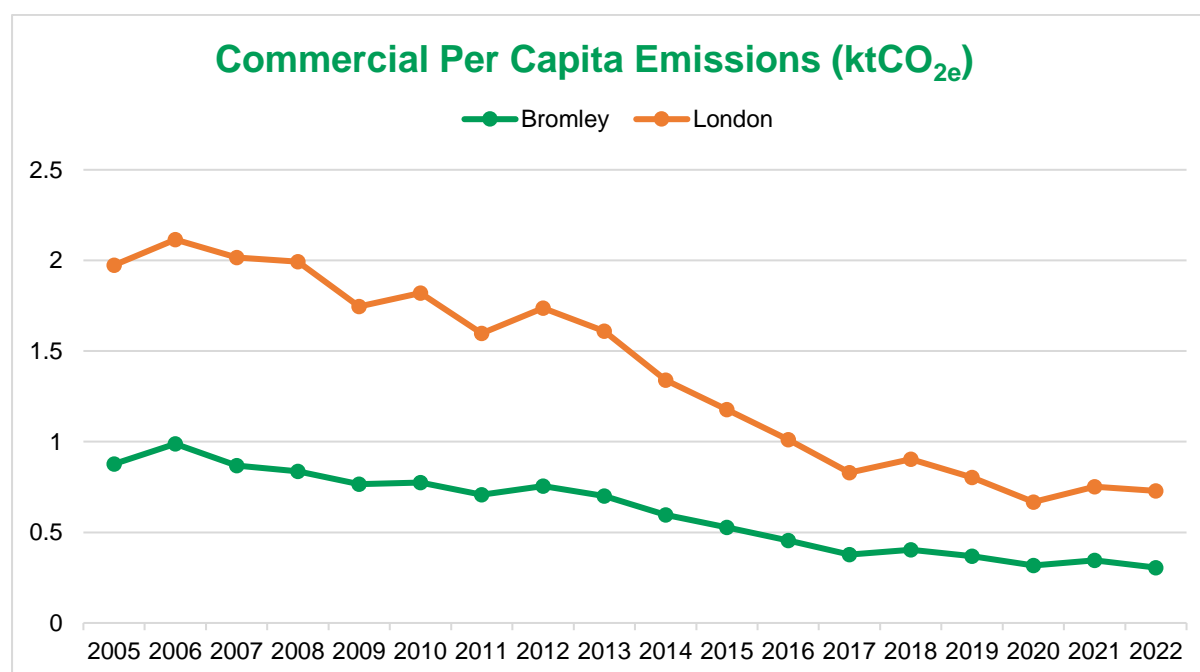
LBB currently signposts local SMEs to grants, advice and networking platforms to encourage their growth. Skills training is also an important part of stimulating the local economy, through LBB's economic development team.

Figure 10: Commercial and Industrial Emissions (2005 - 2022) (DESNZ data)



As visualised in Figure 11 below, Commercial per capita (per person) territorial emissions are lower for Bromley compared to the whole of Greater London. However, the trends shows that this gap has narrowed, particularly up until 2017.

Figure 11: Commercial Per Capita Emission for Bromley and Greater London (DESNZ data)



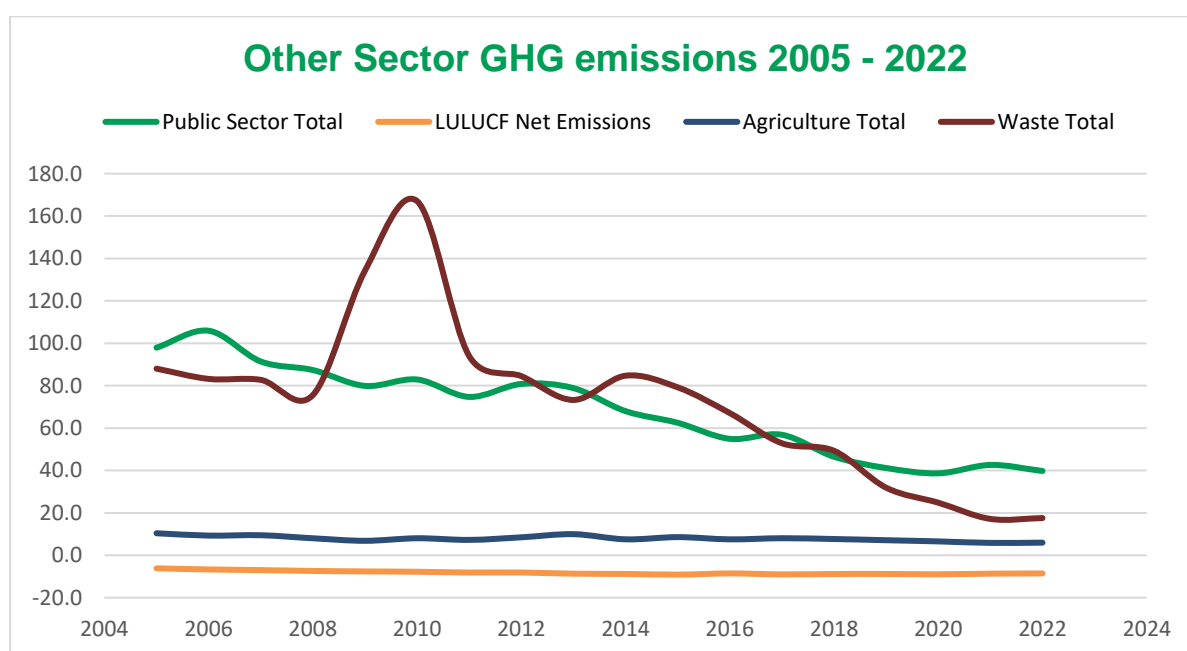
5.1: Other sector emissions:

All other Sectors only make up 7% of the Boroughs GHG emissions (and -1% for land use, land use change and forestry). It highlights that changes in land use have contributed to carbon sequestration (plants taking CO₂ from the atmosphere through photosynthesis). Figure 12 below shows the trend of GHG emissions between 2005 to 2022. The general trend shows that Waste and Public Sector emissions have had significant reductions, and agricultural and LULUCF has remained comparatively stable and small.

Bromley's Waste is processed outside of the Borough, with household non-recyclable waste being incinerated at SELCHP in the London Borough of Lewisham. Nevertheless, the waste amount in Figure 12, includes the waste that is produced within the borough and transported elsewhere, as emissions have been allocated back with the producer.²⁷ There has been an 80% decrease in waste emissions (2005 to 2022), despite a small 2% uptick in emission from 2021 – 2022.

²⁷ UK local and regional greenhouse gas emissions estimates for 2005-2022 Technical Report – DESNZ, page 64

Figure 12: All other sector GHG emissions 2005 – 2022



6.1. Consumption-based emission Data (2021):

The consumption-based emissions data is one year behind the territorial emissions discussed in the previous sections. The difference between territorial and consumption-based emissions is shown in Figure 13. It highlights that territorial emissions are emissions that are produced within the borough. Whereas consumption-based emissions include emissions from imported goods and services and consumed in the borough of Bromley but excludes emissions from exported goods and services. Consumption based emissions are defined in London Council's technical report.²⁸

For Bromley, this means including imported good such as food and excluding goods that are produced within the borough. The total for terrestrial emissions was 914 KtCO₂e compared to 3495 KtCO₂e for Consumption-based emissions in 2021. This highlights the significant amount of goods consumed in Bromley that are not produced within the borough.

²⁸ Consumption-Based Emissions (CBEs) dataset for London, Technical Report pg 5 – 9, londoncouncils.gov.uk

Figure 13: Difference between territorial and consumption-based emissions (text recreated from London Councils' report with figures for LBB).²⁹

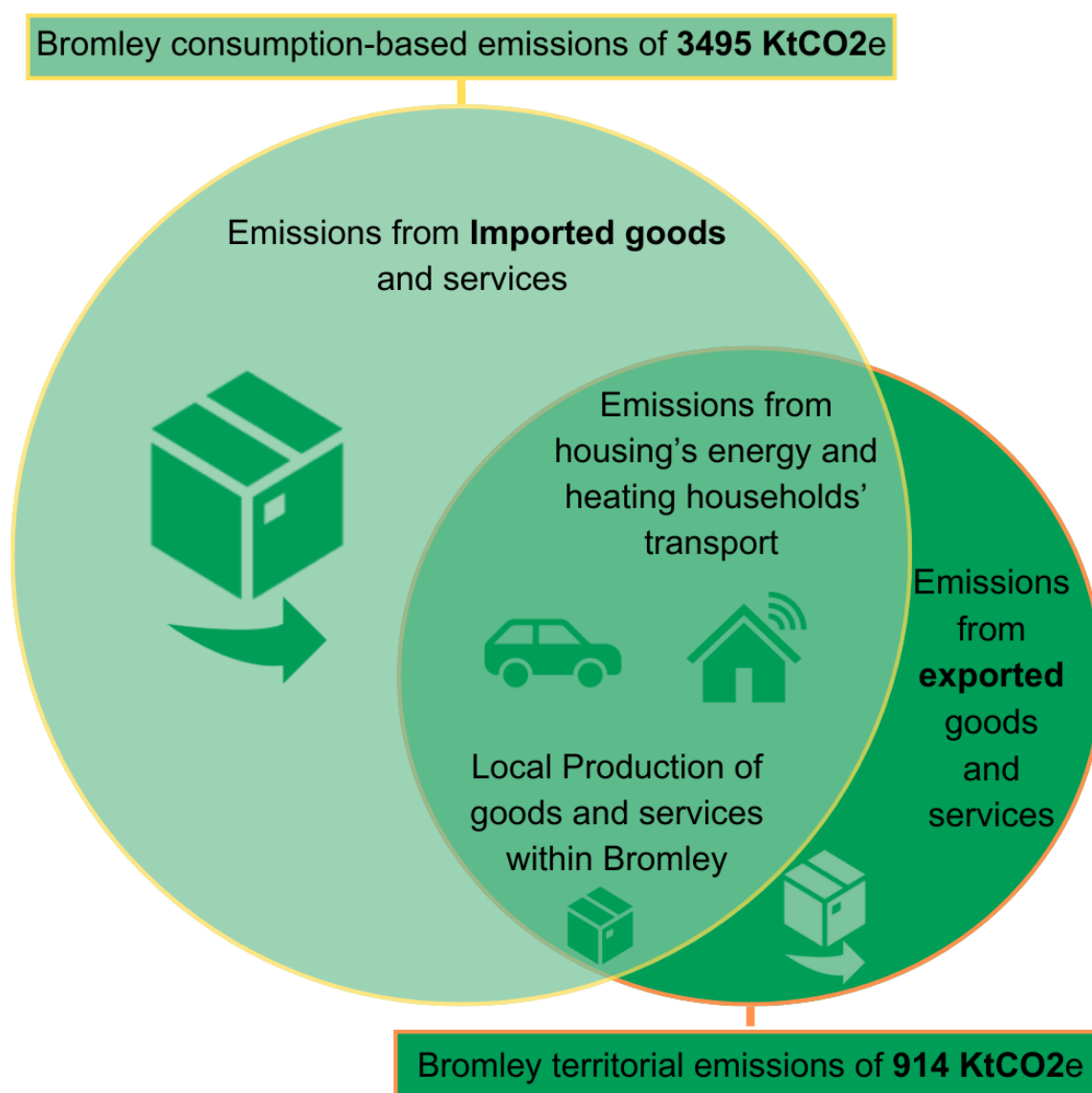
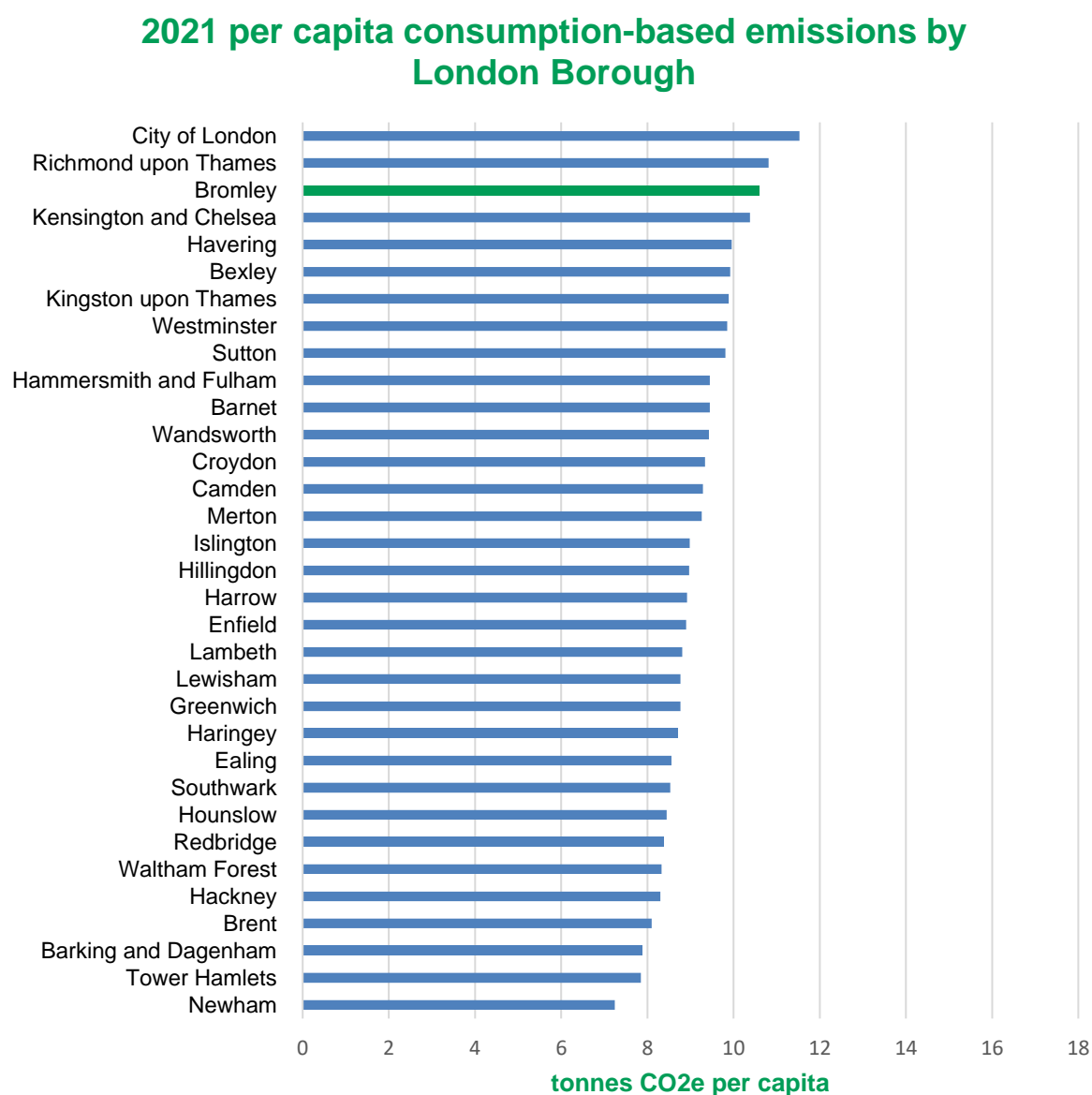


Figure 14 below shows the per capita (per person) consumption-based emission data. In contrast to the terrestrial per capita emissions, Bromley is well above the London borough average at the 3rd highest emitter. This means that Bromley imports more goods per person than most other London boroughs. 'Consumption-based emissions can be considered to reflect the consumption and lifestyle choices of a country's citizens.'³⁰

²⁹ A borough's guide to understanding and tackling consumption-based emissions, London Councils, Published July 2024.

³⁰ How do CO₂ emissions compare when we adjust for trade, Our World in Data

Figure 14: 2021 Per capita emissions by London Borough



Glossary of terms:

Term	Definition (references correspond to numbered sources below)
Consumption-based emissions	Consumption emissions include emissions generated in the production of imported goods, and subtract emissions generated in the production of goods that are exported. ³⁰
Energy Performance Certificate (EPC)	EPC shows how energy efficient a property is. An EPC contains: <ul style="list-style-type: none"> • information about a property's energy use and typical energy costs • steps to improve a property's energy efficiency and save money It gives an energy efficiency rating of A (the best) to G (the worst). ³¹
Greenhouse Gases (GHG)	Greenhouse gases are gases that absorb and emit radiation. They absorb infrared radiation and contribute to the greenhouse effect. This is where short-wave radiation from the sun passes through the atmosphere and longer wave radiation re-emitted from the earth is partially absorbed by GHG. ³² The GHG within the three datasets used include carbon dioxide, methane and nitrous oxide.
KtCO_{2e}	Greenhouse gas emissions (GHG) in line with the GHG protocol are reported in units of carbon dioxide equivalents (CO _{2e}) in all three datasets. This means that the impact of each of the three main greenhouse gases to be expressed in terms of the amount of CO ₂ that would create the same amount of warming, allowing easy comparison of the impact of different emission types. The GHG included are carbon dioxide, methane and nitrous oxide. Kilotonnes of carbon dioxide equivalent (ktCO _{2e}) means 1,000 tonnes of Carbon Dioxide equivalent (tCO _{2e}). ²
Per Capita	Per capita means the amount for each person.
Per Capita Consumption-based	Per Capita consumption-based emissions mean the per person emissions produced within Bromley (or given area) including imports and subtracting exports.
Per Capita territorial emission	Per Capita territorial emissions mean the per person emissions produced within the borough (or given area).
Territorial emissions	Territorial emissions are those within the borders of a country (or other area), i.e. ignoring emissions generated in the production of imported goods and including emissions generated in the production of exported goods. ²⁹

³¹ Energy Performance Certificates, Selling a home, gov.uk

³² Greenhouse Gases, the Met Office

Sources:

1. Local Authorities and the 6th Carbon Budget – Committee Climate Change December 2020
2. UK greenhouse gas emissions: local authority and regional - Department for Energy Security and Net Zero (DESNZ)
3. London Energy and Greenhouse Gas Inventory (LEGGI) - Greater London Authority (GLA)
4. Consumption-Based Emissions (CBEs) dataset for London – Greater London Authority (GLA)
5. London Atmospheric Emissions Inventory (LAEI) – GLA and TfL Air Quality
6. Local indicators for Bromley (E09000006) – Office for National Statistics
7. The Bromley Local Plan – 2019
8. Energy efficiency: what you need to know, Department for Business, Energy and Industrial Strategy, gov.uk
9. London Borough of Bromley Housing Strategy 2019 – 2029
10. Energy Efficiency: Building towards Net Zero, House of Commons, 2017-2019.
11. Quarterly Energy Prices, 22 December 2022, Department for Business, Energy & Industrial Strategy
12. Sub-regional Fuel Poverty England 2024 (2022 data), Department for Energy Security and Net Zero
13. Sub-regional Fuel Poverty England 2023 (2021 data), Department for Energy Security and Net Zero
14. Landlords: how to make your property more energy efficient – Energy Savings Trust (Blog post 13 March 2025)
15. Warm Homes: Local Grant – Department for Energy Security and Net Zero
16. Buro Happold 2024 assessment of private and private rented homes eligibility requirement
17. Apply for the Boiler Upgrade Scheme, gov.uk
18. Apply for support from the Great British Insulation Scheme, gov.uk
19. Help from your energy supplier: the Energy Company Obligation, gov.uk
20. Winter Fuel Payment statistics, Great Britain: Winter 2022 to 2023, Department for Work and Pensions (DWP)
21. Greenhouse gas emissions from transport in 2022, Department for Transport, Published 12 December 2024
22. Transport and environment statistics: 2022, Department for Transport, Published 19 October 2023
23. Road length statistics (RDL), Department for Transport, 5 July 2018
24. TfL London Car Ownership 2022-23 FOI, Published 15 July 2024, tfl.gov.uk
25. Article: The Superloop: connecting outer London boroughs, more quickly, London.gov.uk
26. UK electric vehicle infrastructure strategy - GOV.UK
27. UK local and regional greenhouse gas emissions estimates for 2005-2022 Technical Report – DESNZ, page 64
28. Consumption-Based Emissions (CBEs) dataset for London, Technical Report pg 5 – 9, londoncouncils.gov.uk

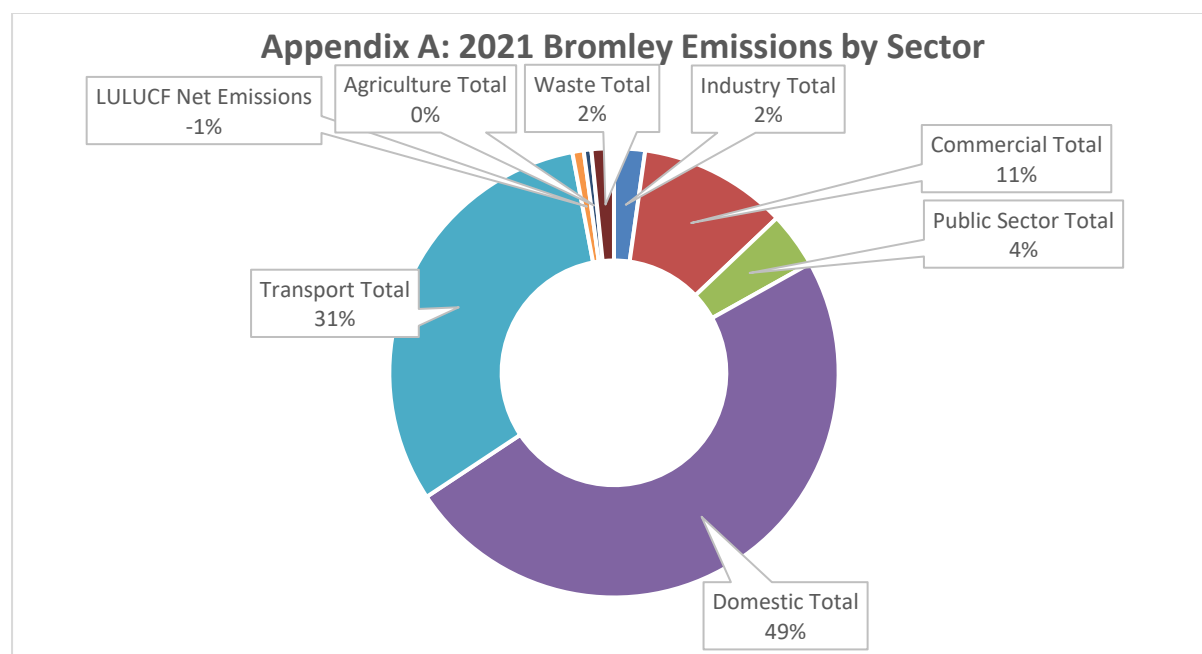
29. A borough's guide to understanding and tackling consumption-based emissions, London Councils, Published July 2024.
30. How do CO2 emissions compare when we adjust for trade, Our World in Data
31. Energy Performance Certificates, Selling a home, gov.uk
32. Greenhouse Gases, the Met Office
33. London Borough of Bromley, Bromley CO2 Emissions Report 2021.

Appendices

The superscript number in each appendix corresponds to the same numbered source within the data sources above.

Appendix A:

2021 Emissions by Sector:³³

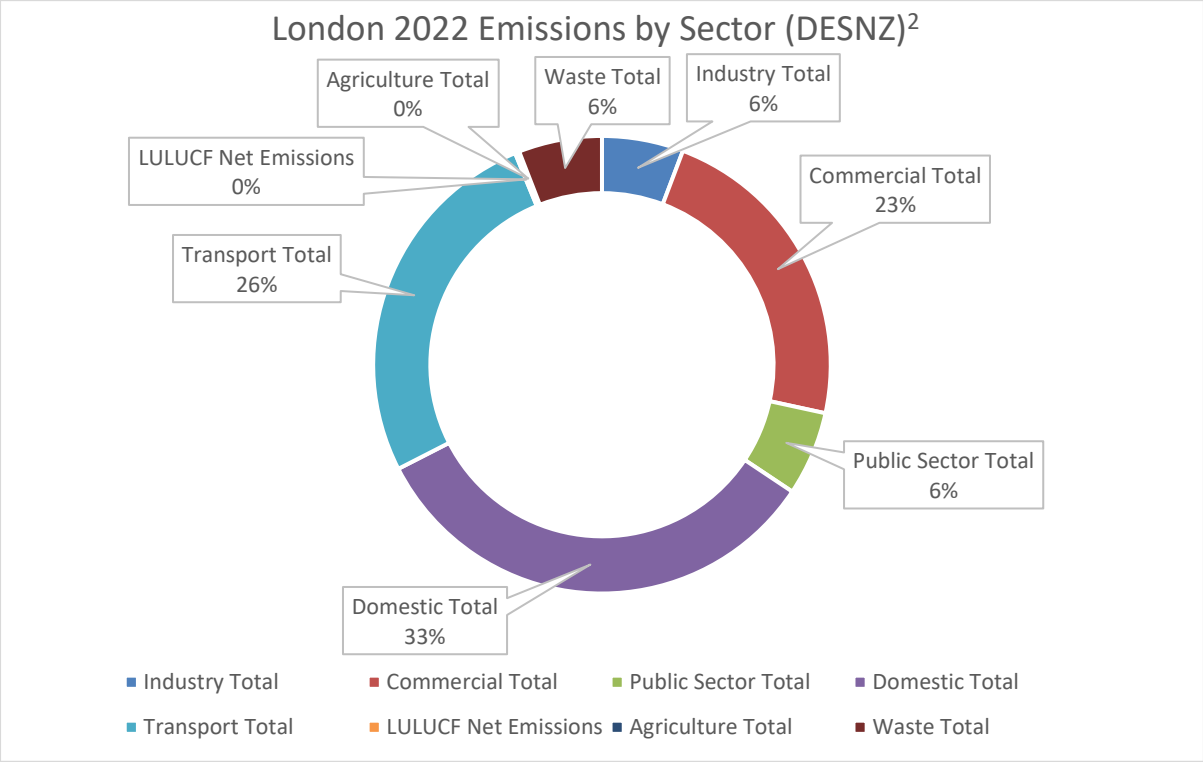


Appendix B:

% change of sectors 2021-22 (year totals in ktCO₂e) (DESNZ)²:

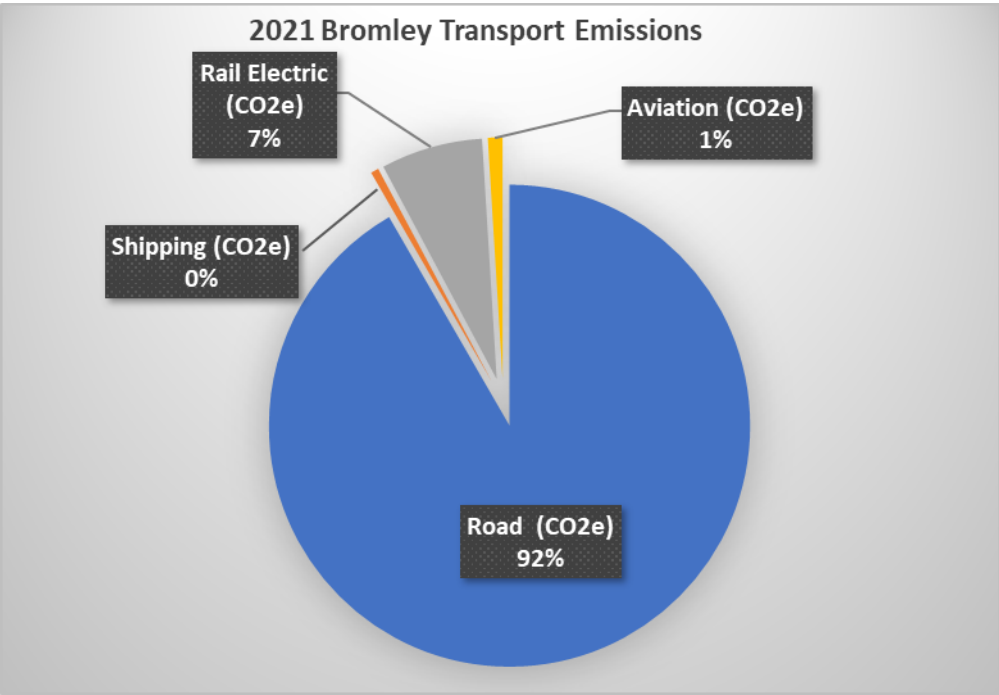
Calendar Year	Industry Total	Commercial Total	Public Sector Total	Domestic Total	Transport Total	LULUCF Net Emissions	Agriculture Total	Waste Total	Grand Total
2021	23.7	113.8	42.6	520.1	334.0	-8.7	5.8	17.1	1,048.5
2022	24.5	100.7	39.8	449.8	323.5	-8.6	6.0	17.5	953.2
Percentage change (%) 21-22	3.1	-11.5	-6.7	-13.5	-3.1	-1.2	1.9	2.3	-9.1

Appendix C:

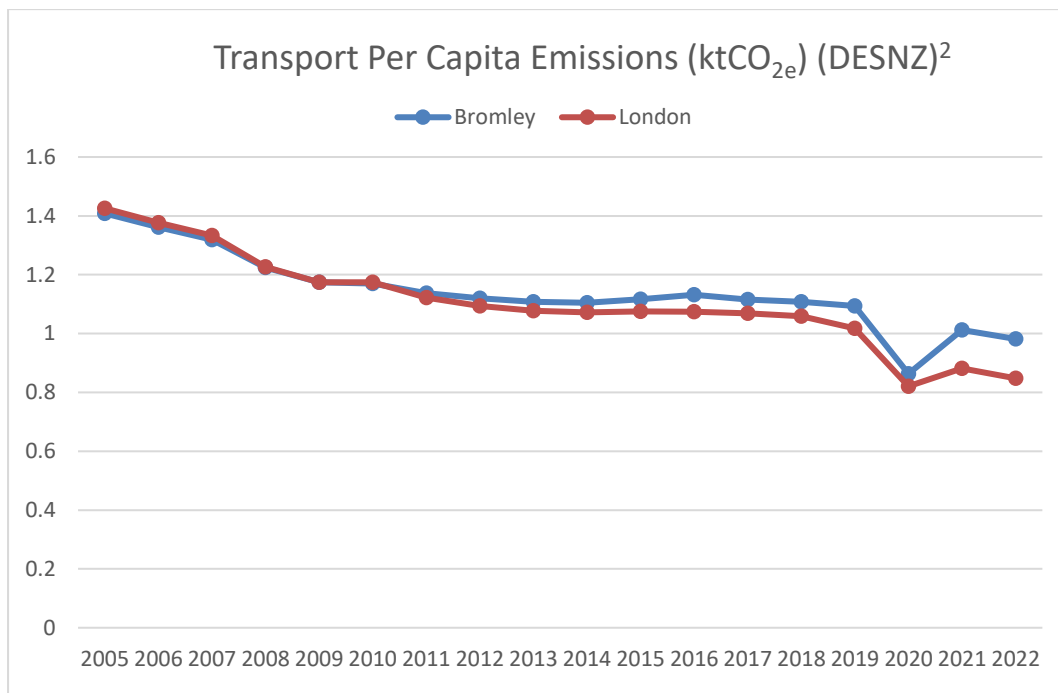


Appendix D:

2021 Bromley Transport Emissions (LEGGI)³.

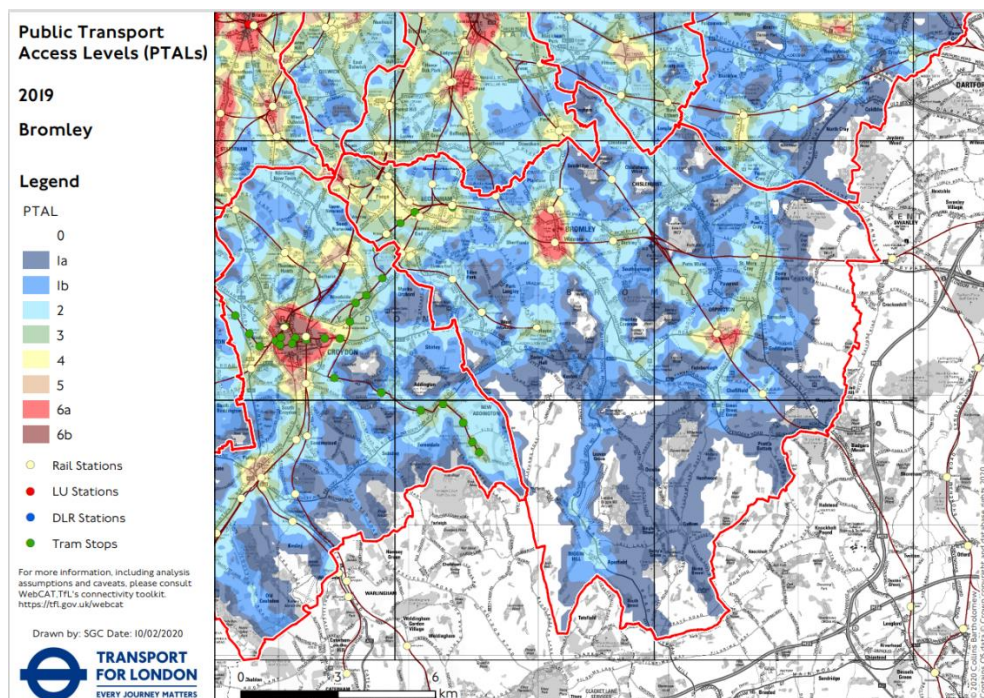


Appendix E:



Appendix F:

Public Access Levels for Bromley in 2019, published by TfL.



The public access levels rates locations from distance from frequent public transport services. For example, Bromley town centre has 6a (red) the second-best rating. Whereas other areas such as Pratt's Bottom have the second worst rating.