

**London Borough of Sutton**

**Greenhouse Gas Emissions Report**

**Reporting year 2023/24**



## 

[**1. Introduction**](#_4d7eve974d5u) **3**

[1.1. Purpose of the report](#_87tiw1k5gzjm) 3

[1.2. Quality assurance statement](#_dfbs2x6iag0b) 3

[1.3. Organisational Goals](#_e6i0az72ye2v) 3

[1.4. GHG Target](#_j6l7313n3b1b) 3

[1.5. Responsible Officers](#_9mx7nvhqdism) 3

[1.6. Company Information](#_nhjudfsx3xsj) 3

[1.7. Reporting Period](#_a7zglbomue9y) 4

[1.8. Quantification and Reporting Methodology](#_wvpwnt1pyrhy) 4

[**2. Scope**](#_m74b40b7okgk) **4**

[2.1. Organisational Boundary](#_maz36czb49c) 4

[2.2. Operational Scopes](#_4tfqov8ol2ak) 4

[Table 1: Declaration of reported emission-releasing activities](#_6ef6orvlluh1) 5

[**3. Results**](#_oprq714prrye) **5**

[3.1. Headline results for 2023/24](#_jnyd43chh1iv) 5

[3.2. Results by scope and activity](#_mvaob05elyug) 6

[**4. Actions aimed at reducing consumption and emissions**](#_neare5fl84m6) **9**

[**5. Additional Information**](#_1340t2v55ais) **9**

[5.1. Recalculation Policy](#_4omfn2n5rtm2) 9

[5.2. Intensity Measure](#_g3k4anhfghay) 10

[5.3. Carbon Offsets](#_q02gy4jndpyh) 10

[5.4. Green Tariffs](#_8wp2t9ip29w8) 10

## 

## Introduction

### Purpose of the report

This report satisfies the requirement for local authorities to measure and report their greenhouse gas emissions, as set out by the Department for Communities and Local Government single data list.

### Quality assurance statement

The council's Internal Audit team has conducted a review of the methodology for calculating the authorities GHG emissions and no qualifications have been raised.

### Organisational Goals

The London Borough of Sutton has a long standing history of taking action to improve the environment. In 2019 the council published its Environment Strategy as well as declaring a climate emergency. The Environment Strategy was updated in 2020, to incorporate a Climate Emergency Response Plan.

The vision of the [Environment Strategy and Climate Emergency Response Plan](https://www.sutton.gov.uk/documents/20124/449217/SUT_0201_Climate_Strategy_CERP_22_Updated+%281%29.pdf/1f91f8e4-e35c-c732-dcde-ba391eabed70?t=1678887438766) is for Sutton to become London’s most sustainable borough. This includes a commitment to achieving net zero carbon emissions, both across the council's own operations and across the borough. The council updates the Climate Emergency Response Plan annually, with the last update being published in December 2022.

### GHG Target

The council aims to achieve net zero carbon emissions across its estate. We will reduce emissions as far as possible through mitigation before undertaking offsetting activities. The target is for scopes 1,2 and 3.

### Responsible Officers

Thuso Selelo Assistant Director of Asset Management, Planning & Capital Delivery and Paul Algeo, Head of Programme & Projects Management, are responsible for meeting this target.

### Company Information

The London Borough of Sutton is a local authority in Greater London, one of 32 London boroughs. The main council offices are its Civic Offices which are located at:

St. Nicholas Way

Sutton

Surrey

SM1 1EA

### Reporting Period

The reporting period used for this report is ‘2023’, 1 April 2023 – 31 March 2024.

### Quantification and Reporting Methodology

We have followed the 2013 DEFRA guidance ‘Environmental Reporting Guidelines’. This guide is designed to help businesses measure and report their environmental impacts, including greenhouse gas emissions.

We have also used 2023 UK Government Conversion Factors for greenhouse gas reporting.

Using the methodology above, greenhouse gas emissions are reported and converted into a CO2 equivalent (CO2e)

## Scope

### Organisational Boundary

The operations from which we collect data are those over which the Local Authority has financial control (i.e. has the ability to direct their financial and operating policies). Consequently, data from schools with academy status, social housing and properties let for commercial operations are excluded. Data from wholly owned subsidiaries of the council has also not been included.

### Operational Scopes

We measure emissions from activities under scopes 1, 2 and, to a limited extent, scope 3 as shown in Table 1.

#### 

#### Table 1: Declaration of reported emission-releasing activities

| **Council activity giving rise to significant carbon emissions** | **Scope** | **Reported in 2020/21** |
| --- | --- | --- |
| Parks Maintenance (vehicles/equipment not owned or controlled by LA) | 3 | Yes |
| Premises\* energy consumption (liquid and gaseous fuels) | 1 | Yes |
| Premises\* fugitive emissions (air conditioning leaks) | 1 | No |
| Premises\* energy consumption (purchased electricity) | 2, 3 | Yes |
| Owned transport | 1 | Yes |
| Staff business travel (vehicles not owned or controlled by LA) | 3 | Yes |
| Street lighting, traffic lights, signs and bollards (purchased electricity) | 2, 3 | Yes |
| Waste Collections (vehicles not owned or controlled by LA) | 3 | Yes |

\*Our premises include maintained , voluntary aided and foundation schools, offices, libraries, day care centres, youth centres and community centres

## Results

### Headline results for 2023/24

* + 1. The total[[1]](#footnote-0) net GHG emissions from our own operations in 2023 was 7,444 tonnes CO2e, which is 57% lower than the 2008 base year emissions.
    2. Our GHG emissions from scopes 1 and 2 activities have decreased by 63% (10,117 tonnes) compared to the base year. By scope, the changes from 2008 to 2023 were:
* Scope 1 emissions decreased by 52%
* Scope 2 emissions decreased by 70%
  + 1. Our overall intensity ratio which measures emissions per m2 has also reduced by 57% compared to the 2008 base year. This ratio allows us to measure changes which are due to reductions in consumption as opposed to changes in the size or number of properties within our portfolio.

### Results by scope and activity

**Table 2: GHG emissions by scope for current period and baseline year**

|  | Tonnes of CO2e | |
| --- | --- | --- |
|  | 2023 | Base Year 2008 |
| **Scope 1** | 2,950 | 6,095 |
| **Scope 2** | 3,040 | 10,012 |
| **Scope 3** | 1,393 | 1,010 |
| **Outside of Scope** | 61 | 6 |
| **Total gross emissions** | 7,444 | 17,123 |
| Intensity measurement Scopes 1 & 2 ‘Kilograms of CO2e per sq m of GIA | 30.75 | 70.95 |

**Table 3: GHG emissions by source activity for the year 2023 (1 April 2023 to 31 March 2024)**

| **Scope/Activity** | **Units** | **% of data that is estimated** | **Consumption** | **GHG Emissions (tonnes CO2e)** |
| --- | --- | --- | --- | --- |
| **Scope 1** |  |  |  |  |
| Gas Boilers | kwh | 5 | 15,934,322 | 2,914,848 |
| Diesel | litres |  | 13,891 | 34,895 |
| Petrol | litres |  |  | 0 |
| **Scope 2** |  |  |  |  |
| Electricity - Premises | kwh | 2 | 10,725,824 | 2,221,042 |
| Electricity - Street Lighting | kwh |  | 3,954,133 | 818,799 |
| **Scope 3** |  |  |  |  |
| Business Travel | km |  | 393,707 | 65,607 |
| Waste Collection | litres |  | 367,114 | 1,064,507 |
| Transmission & Distribution | kwh |  | 14,679,957 | 262,993 |

**Table 4: Annual GHG emissions for all years measured**

|  | Tonnes of CO2e | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Category | 2023 | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | Base Year 2008 |
| Scope 1 | 2,950 | 3,117 | 3,065 | 2,696 | 3,279 | 3,379 | 3,338 | 4,316 | 4,568 | 4,778 | 4,770 | 5,198 | 4,444 | 5,426 | 5,450 | 6,095 |
| Scope 2 | 3,040 | 2,902 | 3,197 | 3,335 | 4,076 | 4,595 | 5,857 | 7,186 | 8,458 | 8,888 | 8,384 | 8,162 | 8,398 | 9,535 | 10,100 | 10,012 |
| Scope 3 | 1,393 | 1,255 | 1,352 | 1,339 | 1,496 | 1,604 | 1,856 | 781 | 832 | 930 | 875 | 822 | 914 | 979 | 1,025 | 1,010 |
| Outside of Scope | 61 | 41 | 62 | 45 | 37 | 25 | 30 | 1 | 2 | 1 | 2 | 22 | 6 | 28 | 6 | 6 |
| **Gross emissions** | 7,444 | 7,315 | 7,676 | 7,415 | 8,888 | 9,602 | 11,081 | 12,285 | 13,860 | 14,597 | 14,030 | 14,204 | 13,762 | 15,968 | 16,580 | 17,123 |
| Kg of CO2e per sq m of GIA | 31 | 31 | 32 | 31 | 38 | 41 | 45 | 53 | 60 | 63 | 59 | 59 | 56 | 65 | 69 | 71 |

* 1. **Data Explanations**

When compared to the base year, consumption of gas (scope 1) decreased across the estate by 31% in total, resulting in a 34% reduction in GHG emissions. Maintained schools reduced their emissions by 45% and corporate buildings decreased by 21%.

Emissions from owned transport (scope 1) have reduced by 98%. This follows the outsourcing of the Waste Collection and Street Cleansing (April 2017) and Parks Maintenance (February 2017) services. The emissions from fuel combustion generated by the contractors delivering these services are reported under scope 3.

The CO2e factor for electricity has decreased by 58%[[2]](#footnote-1) when compared to the base year. This has enhanced the reduction in emissions from electricity consumption under scope 2. Street lighting and corporate buildings have reduced consumption by 32% since 2008 with a corresponding 72% reduction in emissions. Consumption in schools has decreased by 4%, with a corresponding reduction in emissions of 60%.

We have made some amendments to the reported results in prior years. In the first instance, a site had been omitted. Construction was completed in October 2010 but it was not added to the data set. This has now been rectified and we have updated the data for the years 2018 - 2022 to recognise this.

In the second instance, we recognised an error in the electricity consumption for a single site in 2022. This has also been corrected.

The impact of these amendments has been an average of less than 1% increase to reported emissions each year under scope 1 and an average of 1.2% increase to reported emissions under Scope 2.

## Actions aimed at reducing consumption and emissions

Listed below are some of the projects completed during the year which have both energy and carbon saving benefits. In some cases, as with the LED upgrades, the projects also have the further advantage of extending the operating life of the asset.

* The decarbonisation of the corporate estate continued with lighting upgrade works at Cheam and Wallington Libraries. Further library lighting upgrades are planned at the Life Centre and at Worcester Park.
* The smart meter program continues with 15 installations during the year 2023-24.
* Decarbonisation surveys continued in 2023-24 and the works following the successful application for funding from the Public Sector Decarbonisation Scheme continued to the Design and Feasibility stage. The introduction of ‘Green Technologies’ at the Sutton Youth Centre will be completed in November 2024
* Investment Grade Audits continued during 2023-24 in the commercial portfolio.

## Additional Information

### Recalculation Policy

We have a fixed base year of 2008 which was chosen in line with reporting requirements for National Indicator 185: “Carbon emissions from Local Authority Estate and Operations”. We have continued to use this baseline to allow the comparison of data with previous reporting.

Our base year calculation policy is to recalculate the base year and the prior year emissions for relevant significant changes. This is defined as changes which meet our significance threshold of 5% of total base year emissions.

Schools in the borough continue to convert from maintained (Community) to non-maintained (Academy) status. If a school converts from maintained to non-maintained within the reporting year, it will be considered out of scope and will not be included in results. In order to ensure we compare on a ‘like for like’ basis, any school that is not included in the current reporting year will also be removed from the 2008/09 baseline and subsequent years.

As there were no significant changes to the estate during the reporting year and the number of schools with Academy status remained at 35, emissions have not been recalculated this year.

Although the Council no longer delivers services from the site at 24 Denmark Road, it is currently still an owned asset and any emissions have been included.

### Intensity Measure

We have chosen ‘kilograms of CO2e per square metre of gross internal area (GIA)’ as this is a common activity ratio in our sector.

### Carbon Offsets

We have not purchased any carbon credits.

### Green Tariffs

All electricity purchased by the Council is supplied through the LASER consortium (public sector energy buying group) on a green energy tariff, meaning it is generated from renewable resources. However, this tariff does not meet the criteria set out by OFGEM and as such, is not exempt from the climate change levy.

1. This includes emissions from Scopes 1, 2 and 3 as well as out of scope emissions [↑](#footnote-ref-0)
2. In the 2019 GHG Conversion Factors, there was a 10% decrease in the UK Electricity CO2e factor compared to the previous year. In the 2020 update, the CO2e factor decreased (compared with 2019) again by 9%. In the 2021 update, the CO2e factor has again decreased by 9% (in comparison to the 2020 update). The above decreases are all due to a decrease in coal use in electricity generation and an increase in renewable generation. In the 2023 update, the UK Electricity CO2e factor has increased by 7% (compared to the 2022 update) due to an increase in natural gas use in electricity generation and a decrease in renewable generation. [↑](#footnote-ref-1)