Lewisham Council

Corporate Carbon Reporting 2023/24

1 Introduction

1.1 Lewisham's Climate Action Plan was published in 2020[1] and updated in 2024[2]. 'Leading by Example' was one of 5 themes within the Action Plan, underlining the importance of the Council's commitment to climate action through decarbonising its own operations.

1.2 This report is part of the evidenced-based approach that will be essential in focussing the resources needed to deliver on the Council's ambition to decarbonise.

1.3 The carbon emissions presented in this report are from electricity, gas and water consumption across the Council's corporate buildings, schools, leisure centres, as well as fuel consumption associated with the Council's fleet. The methodology for calculating emissions has been based on the Local Partnerships Greenhouse Gas reporting tool[3] in line with good practice on carbon reporting established through the London Councils led Emission Accounting Working Group in 2021. Further information about the methodology and recommendations for future development are set out in section 3 below and Annex 1.

1.4 All carbon data is presented as tCO_2e, tonnes of carbon dioxide 'equivalent', based on carbon factors in the Local Partnerships reporting tool for carbon dioxide and, where relevant, other greenhouse gases converted into carbon dioxide.

1.5 The data presented in this report covers the period 2018/19 to 2023/24.

[1] https://councilmeetings.lewisham.gov.uk/documents/s81350/Climate%20Emergency%20Action%20Plan.pdf
[2] https://lewisham.gov.uk/myservices/environment/climate-emergency/our-commitment/our-climate-emergency-declaration
[3] https://localpartnerships.org.uk/greenhouse-gas-accounting-tool/

2 Analysis

2.1 The Council's corporate carbon emissions have fallen significantly over the last decade. In 2014/15[4] the Council reported 45,383 tCO_2e from corporate buildings, schools and fleet. The latest total in 2023/24 is 12,795 tCO_2e. Changes in reporting methodology mean caution is needed in making detailed comparisons between datasets, but it is clear there has been a large overall reduction.

2.2 Since 2018/19 the Council's carbon emissions have reduced by a quarter. Factors driving that reduction include decarbonisation of the national electricity grid, changes to working patterns post-COVID, local improvements to buildings, equipment and fleet, a decrease in the size of the Council's staffing and rationalisation of the Council's portfolio of buildings. More information on improvements to corporate buildings and schools can be found in Annex 1.

Table 1: Corporate carbon emissions 2018/19-2023/24

Carbon emissions by source (tCO2e)	2018/19	2022/23	2023/24	% Annual Change	% Change since baseline
Catford complex	1,667	1,051	1,166	+11%	-30%
- Gas	651	609	711	+17%	+9%
- Electricity	1,012	441	454	+3%	-55%
- Water	5	2	2	-20%	-67%
Other operational buildings	2,054	1,485	1492	0%	-27%
- Gas	1,266	1,071	1052	-2%	-17%
- Electricity	766	408	435	+7%	-43%
- Water	22	6	5	-27%	-79%
Schools	6,214	5,098	5,125	0%	-18%
- Gas	3,513	3,372	3,306	-2%	-6%
- Electricity	2,701	1,706	1798	+5%	-33%
- Water	0	20	21	+2%	-49%
Leisure Centres	3,561	2,040	2,085	+2%	-41%
- Gas	1,963	1,366	1,444	+6%	-26%
- Electricity	1,575	662	633	-4%	-60%
- Water	23	12	8	-36%	-67%
Streetlights	1,266	899	939	+5%	-26%
Fleet fuel consumption	2,349	1,959	1,988	+1%	-15%
Total	**17,112**	**12,532**	**12,795**	**+2%**	**-25%**

2.3 In 2023/24 the Council's emissions increased by 2% compared to the previous year. This increase was driven by a 7% increase in the carbon intensity of the national grid, increased gas consumption at Laurence House and the Civic Suite and an increase in gas consumption at the Wavelengths Leisure Centre site.

[4] https://tinyurl.com/vu7ehmwa

2.4 Emissions across the Catford Complex[5] fell during Covid as working patterns changed, and while carbon associated with electricity consumption has more than halved over that time emissions for gas are now higher than they were in 2018/19, driven by a 24% increase in gas consumption at the Civic Suite and 6% at Laurence House. Further work is needed to understand energy use in these buildings and identify opportunities to cut consumption.

2.5 Further investigation is also needed to understand electricity and gas data at the Broadway Theatre. Electricity consumption has increased by 43% since baseline. During the renovations of the Theatre a new heating system and meter was installed but the data for 2023/24 does not record gas consumption at this site.

2.6 Outside of the Catford Complex there was a 2% decrease in gas consumption in other corporate buildings. This was driven by the Meliot Centre and Leemore Resource Centre. The latter had a heat pump installed replacing the main gas boiler.

2.7 Emissions from electricity in schools increased 5% in the year to 2023/24. While sites like Sydenham School reduced consumption through solar panels and LEDs an additional 23,000 kWh of electricity use was added to the portfolio from 12 new meters at 12 different schools.

2.8 Gas consumption in schools, which accounts for a quarter of the Council's overall CO2 emissions, reduced by 2% since 2022/23 and by 6% since the baseline. In the 12 months covered by this report reductions in gas consumption were identified at Brent Knoll Special School and St Augustine's Roman Catholic School. Brent Knoll's decrease is most likely related to erratic estimates prior to having a smart meter installed. St Augustine's decrease was due to their boiler breaking down. An increasing number of Lewisham's grant-maintained schools have had investment to replace failing gas boilers with air source heat pumps. This includes works completed at Dalmain, Myatt Garden and Downderry, with funding secured for works at Baring, Fairlawn, Stillness Infants and Stillness Juniors in summer 2026.

2.9 Emissions for leisure centres increased by 2% in 2023/24. This rise is primarily driven by an increase in gas consumption by Wavelengths Leisure Centre and to a lesser extent Forest Hill pool. The rise at Wavelengths was due to issues with the boiler and plant, causing them to run throughout the day and night. Repairs to the plant equipment and of a long-standing water temperature issue in 2023/24 have also entailed an increase in gas consumption. The rise at Forest Hill Pools is due to prior downtime of their Combined Heat and Power plant in 2022/23.

2.10 Emissions from electricity consumption at leisure centres were lower than they would have been in 2023/24 as a result of energy efficiency measures. For example, the installation of LEDs in Forest Hill Pools and Glassmill leisure centre.

2.11 Emissions associated with the Council's fleet remain 15% below pre-Covid levels. This is because of improvements to vehicle efficiency resulting from the replacement policy upgrading standards, and in some cases switching away from petrol/diesel to electric. The Council's new Fleet Strategy is expected to result in an additional 12% reduction. In the 12 months to 2023/24 fuel consumption increased 3%. This is likely to be a result of increased mileage by waste collection vehicles relating to an expanded food waste collection service. 97% of reported fleet emissions are a result of diesel vehicles and the remaining 3% petrol. No data is available for electric vehicles. 55% of all reported fleet emissions are from the Waste and

[5] This is the Council main set of buildings in Catford including Laurence House, the Civic Suite, Old Town Hall, Town Hall Chambers and Broadway Theatre

Recycling service, 18% from Housing, 11% from Social Care, 11% from Environmental Services and 5% from Others.

2.12 Streetlighting saw a 2% decrease in electricity consumption in 2023/24, most likely to be a result of changes to the number of lights on the inventory. Despite this the associated emissions increased by 5%. This is due to the 7% increase in carbon intensity of the electricity grid in the 12 months to 2023/24.

Table 2: Council energy/water consumption by source

Consumption by source	2018/19	2022/23	2023/24	% Annual Change	% Change since baseline
Catford complex electricity (kWh)	3,574,007	2,278,525	2,192,353	-4%	-39%
Catford complex gas (kWh)	3,535,881	3,333,686	3,884,886	17%	10%
Catford complex water (m3)	13,400	12,788	8,677	-32%	-35%
Other operational buildings electricity (kWh)	2,705,242	2,110,009	2,099,948	0%	-22%
Other operational buildings gas (kWh)	6,878,717	5,864,829	5,751,592	-2%	-16%
Other operational buildings water (m3)	65,108	43,075	26,759	-38%	-59%
Schools electricity (kWh)	9,540,104	8,822,676	8,685,071	-2%	-9%
Schools gas (kWh)	19,092,667	18,471,475	18,051,151	-2%	-5%
Schools water (m3)	-	137,001	117,641	-14%	0%
Streetlights (kWh)	4,472,480	4,646,455	4,535,847	-2%	1%
Fleet fuel consumption	899,169	769,316	795,170	3%	-12%
Leisure Centres electricity	5,563,629	3,424,079	3,058,052	-11%	-45%
Leisure Centres gas	10,668,773	7,480,995	7,892,376	5%	-26%
Leisure Centres water	67,219	80,181	43,532	-46%	-35%

Table 3: Corporate sources carbon emissions in 2023/24 in order of highest emitter

Rank	Source (% of total)	tCO2e	% Annual Change	% Change since baseline
1	Schools gas (26%)	3,306	-2%	-6%
2	Fleet (16%)	1,988	+1%	-15%
3	Schools electricity (14%)	1,798	+5%	-33%
4	Leisure Centres gas (11%)	1,444	+6%	-26%
5	Other operational gas (8%)	1,052	-2%	-17%
6	Street lighting (7%)	939	+5%	-26%
7	Catford complex gas (6%)	711	+17%	+9%
8	Leisure Centres electricity (5%)	633	-4%	-60%
9	Catford complex electricity (4%)	454	+3%	-55%
10	Other operational electricity (3%)	435	+7%	-43%

3 Lewisham scope 1 and 2 emissions in context

3.1 In June 2025 the Government published the latest annual local authority area-wide carbon emission data[6] covering the period from 2005 to 2023. Emissions in the borough of Lewisham have fallen 52% on this measure to 597,583, tCO2e[7]. Lewisham's corporate carbon emissions in 2023/4 represent 2% of this total[8].

3.2 Emissions from the Council's housing stock are outside the scope of this report. Most tenants manage their own utility contracts and this data is not available to the Council. The emissions associated with the Council's housing stock have been estimated at 45,411 tCO2e[9]. The Council's combined corporate and housing emissions are 9.7% of the Government's reported emissions for the borough.

3.3 In 2025 officers commissioned an assessment of the carbon emissions associated with the Council's purchase of goods and services, which has estimated the total annual emissions from the Council's supply chain at 248,449tCO2e. This figure is twenty times the direct emissions reported in this document. Further work is now planned to prioritise and engage with suppliers to encourage reporting and target setting to reduce emissions associated with Council contracts.

4 Recommendations for future reporting

4.1 Fully understanding the Council's environmental impact requires investment to expand the scope of data collection and data quality. Ways in which data could be improved includes:

- Complete the roll out of smart meters for utilities across the corporate and schools' estate. 90% of gas and water meters have been upgraded but only 50% of electricity meters.
- Increased capacity and improving systems in the corporate energy team to improve data collection and analysis particularly in relation to unexplained consumption.
- Improving consistency across reporting where third parties deliver services from Council-owned sites, aligning this data with supply chain data where relevant.
- Reporting the outcome of the staff travel survey and integrating this into future analysis of the Council's carbon and environmental impact.
- Recording volumes of waste and recycling from corporate buildings.
- Expand reporting on fleet emissions to include electric vehicle electricity consumption when charging.
- Expand the current supply chain emissions analysis to include all scope 3 emissions and align the reporting, for example in relation to schools.

[6] UK local authority and regional greenhouse gas emissions statistics, 2005 to 2023 - GOV.UK

[7] This figure is from the CO2 dataset, as opposed to the greenhouse gas dataset, also provided by the UK government. The 52% reduction is calculated by dividing the 2023 emissions, 597.6 ktCO2e, by the 2005 emissions, 1,248 ktCO2e, and subtracting one.

[8] This is calculated by dividing the 2023/24 figure for Lewisham corporate emissions, 12,623 tCO2e, by the 2023 figure for whole borough emissions, 597,583 tCO2e.

[9] This figure is estimated using modelled data calculated through the Parity Project Portfolio software.

Annex 1 Methodology

1. The report presents data from the six financial years from 2018/19 to 2023/24. Consumption data (kWh and m3) is converted to tonnes of CO2e or 'tCo2e' using published conversion factors. The 'e' refers to 'equivalent', which refers to other greenhouse gases with an equivalent greenhouse effect to carbon.

2. The report is based on the Greenhouse Gas Protocol[10] definition of emission scopes and used the carbon factors set out in the Local Partnerships Greenhouse Gas reporting tool[11] in line with an agreement on good practice for carbon reporting established through the London Council led Emission Accounting Working Group in 2021. The Greenhouse Gas Protocol scope definitions are set out below in Table 4:

Table 4: Greenhouse gas emission inventory definitions

Scope	Definition
Scope 1	GHG emissions from sources located within the city boundary
Scope 2	GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the city boundary
Scope 3	All other GHG emissions that occur outside the city boundary as a result of activities taking place within the city boundary

3. The focus of this report is primarily scope 1 and 2 emissions due to the availability of data. The Council's leisure centres are operated by a third party under a contract and so should be considered scope 3 emissions but have been treated as scope 1 and 2 as the provision of leisure services would be considered a core Council function by the vast majority of the facilities and the data is available. Similarly, water is technically scope 3 but has been included here for completeness and will be separated out once a full scope 3 report is published. Further work will be done over the next year to align the assessment of emissions across the Council's supply chain with these sources.

4. When new data has become available, it has been integrated into the whole dataset including for previous years, to allow year on year comparison. For example data on the fleet at Wearside was initially supplied in miles and then converted to CO2. In the last two years this data has also included litres of fuel purchased. As the data went back to 2018 it has been used in this report for all years accounting for differences to previously published data.

5. The analysis of schools' data has identified significant gaps in data for a number of the meters within the portfolio. The planned further investment in smart metering will improve financial as well as environmental monitoring. Where gaps in data have been identified, data has been averaged using the most complete year available to avoid any under reporting of consumption.

6. A staff travel survey was completed in 2022/23 and the results of this will be included in future reporting.

7. Data has been used from the following sources
   - Electricity, gas and water data for corporate sites and schools are all sourced from the Council's energy management software SystemsLink.
   - Street Light data from electricity invoices
   - Fleet data fuel consumption data for petrol and diesel vehicles
   - Leisure Centre estate data provided by GLL (Greenwich Leisure Ltd.)

[10] https://ghgprotocol.org/
[11] https://localpartnerships.org.uk/greenhouse-gas-accounting-tool/

Data Cleansing

8. Other data cleansing that has been done includes removal of individual meters or sites where the operation of the building is by a third party and the data is not part of the Council's corporate contracts. Small sites with highly erratic data have also been removed.

9. Deptford Lounge and Tidemill School share a single boiler and have combined water and electricity meters. Ideally this data would be separated out into Other operational Sites and Schools but this has not been possible and instead has been allocated to Schools.

10. For a list of the corporate and school sites used here, please see the past report in which tables are included at the end of the document: https://lewisham.gov.uk/-/media/services/environment/lewisham-council-corporate-carbon-emissions-report-2022-23.pdf Since this report was published the only sites removed from the dataset are Amersham Children's Centre, which is no longer run by the Council and Deptford Lounge, see notes above.

Lewisham Climate Action to reduce scope 1 and 2 emissions since 2018/19

11. The Corporate Estate Maintenance Programme (CEMP) has invested £3.5m between 2021 and 2024 for measures such as LED replacements, roof refurbishments, solar PV systems, and new windows across 35 buildings in the corporate estate. The 2024-2026 programme has a further £1.9m allocated.

12. £175k funding was awarded to Lewisham Council in 2021 from the Government's Low Carbon Skills Fund to assess and develop detailed proposals for zero carbon retrofit work on 10 corporate sites and five schools.

13. £2.9m was subsequently awarded to Lewisham Council from the Government's Public Sector Decarbonisation Scheme and invested in energy efficiency and zero carbon retrofit work in seven corporate buildings and one school.

14. Funded by the Mayor of London's Greener Schools Programme, the Council installed solar PV on three primary schools in 2025.

15. Five schools were fitted with measures such as heat pumps, insulation, new windows and ventilation as part of the Zero Carbon Schools programme, between 2019 and 2022.

16. Plans to upgrade Lewisham's street lighting to LED have been approved and a £5m programme of works is planned for late 2026. Once delivered this work is expected to cut the carbon intensity of street lighting by two-thirds.