



Lewisham Council

Corporate Carbon Reporting 2020/21

1 Introduction

- 1.1 Lewisham's Climate Emergency Action Plan was published in 2020¹. '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 Action 1.1.2 under the 'Leading by Example' theme is:
- Publish an annual 'Corporate Use of Resources' statement setting out performance in relation to corporate carbon emissions, energy consumption, water, waste & recycling, paper use, staff travel, procurement, IT (information technology) and other environmental indicators.*
- 1.3 The ambition for the Council and borough to be net zero carbon by 2030 is hugely stretching. An evidenced-based approach will be essential to focus the resources needed to deliver on this ambition and inform Council decision-making.
- 1.4 This report presents carbon emissions resulting from electricity, gas and water consumption across the Council's corporate buildings and schools 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 tool² in line with an agreement on good practice for carbon reporting established through the London Council led Emission Accounting Working Group in 2021. The data presented in the report covers the Council's scope 1 and 2 emissions under the Greenhouse Gas Protocol³ for the time period 2018/19-2020/21. Further points on developing the reporting are made below in the sections below on recommendations (6) and methodology (Annex 1).

2 Corporate carbon emissions 2018/19-2020/21

Carbon emissions by source (tCO ₂ e)	2018/19	2019/20	2020/21	Annual Change
Catford complex	1,666	1,536	1,075	-30%
Other operational buildings	2,042	1,834	1,552	-15%
Schools	6,451	6,137	5,750	-6%
Street lights	1,266	1,124	962	-14%
Fleet mileage	121	121	123	2%
Total	11,545	10,752	9,463	-12%

Table 1. Council scope 1 and 2 carbon emissions by source

¹ <https://councilmeetings.lewisham.gov.uk/documents/s81350/Climate%20Emergency%20Action%20Plan.pdf>

² <https://localpartnerships.org.uk/greenhouse-gas-accounting-tool/>

³ <https://ghgprotocol.org/>

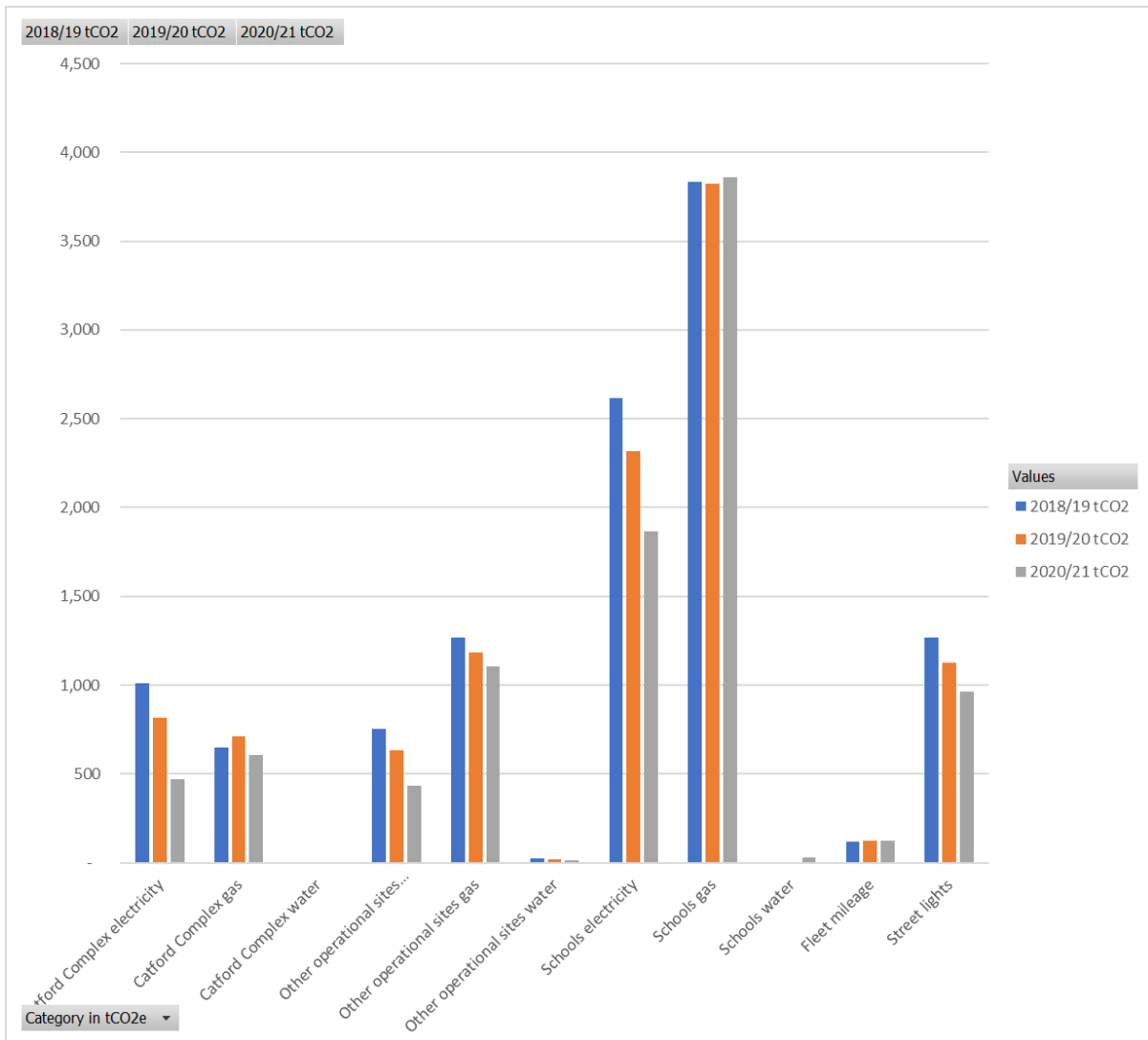


Figure 1. Annual carbon emissions by site type and source type.

Consumption by source	2018/19	2019/20	2020/21	Annual Change
Catford complex electricity (kWh)	3,574,007	3,203,458	2,004,735	-37%
Catford complex gas (kWh)	3,535,881	3,876,452	3,298,335	-15%
Catford complex water (m3)	10,766	13,716	4,622	-66%
Other operational buildings electricity (kWh)	2,661,196	2,474,907	1,849,369	-25%
Other operational buildings gas (kWh)	6,878,889	6,443,260	6,018,702	-7%
Other operational buildings water (m3)	65,380	47,813	41,931	-12%
Schools electricity (kWh)	9,239,356	9,058,257	7,991,960	-12%
Schools gas (kWh)	20,842,507	20,788,854	20,979,462	1%
Schools water (m3)	-	-	85,280	
Street lights (kWh)	4,472,480	4,396,435	4,127,890	-6%
Fleet mileage (miles)	145,340	145,340	147,940	2%

Table 2. Council energy/water consumption by source

Rank	Source	tCO2e	% Annual Change
1	Schools gas	3,857	1%
2	Schools electricity	1,863	-20%
3	Other operational gas	1,107	-7%
4	Street lighting	962	-14%
5	Catford complex gas	606	-15%
6	Catford complex electricity	467	-43%
7	Other operational electricity	431	-32%
8	Fleet	123	+2%
9	Schools water	29	n/a
10	Other operational water	14	-12%

Table 3. Top 10 corporate sources for scope 1 and 2 carbon emissions in 2020/21

3 Analysis

- 3.1 Lewisham Council's corporate carbon emissions have fallen over the last decade. In 2014/15 the Council reported 45,383 tonnes of emissions⁴ from corporate buildings, schools and fleet. Changes in reporting methodology mean that caution is needed in making detailed comparisons between these datasets, but it is clear that there has been a significant overall fall. Factors driving that reduction include decarbonisation of the national electricity grid, local improvements to the fabric of buildings and energy efficiency of equipment and in our fleet, and a decrease in the size of the Council's staff numbers and rationalisation of the Council's portfolio of buildings.
- 3.2 The data presented in this report covers the period 2018/19 to 2020/21 and was compiled in a consistent way across a stable dataset of sites to enable comparisons.
- 3.3 In 2020/21 the Council's corporate emissions⁵ reduced by 12% compared to the previous year. This reduction was primarily a result of reduced electricity consumption, particularly in the Catford complex, other operational buildings and schools. Gas consumption also fell in Council operational buildings but remained static in the schools' estate.
- 3.4 In March 2020 the UK Government announced a national lockdown requiring employers to ensure that employees should working from home wherever possible. While some restrictions were eased in summer 2020 further lockdowns were introduced in 2020/21 and a large number of Lewisham employees spent significant periods of that time 2020/21 working from home resulting in lower occupation levels in corporate buildings and schools.
- 3.5 The pattern of electricity and gas consumption is consistent with the impact of lockdown on the use of corporate buildings and schools. Lower numbers of building users will have decreased demand for electricity but most sites, particularly schools, remained open to some degree with minimal change in heating patterns. There is also evidence that 2020/21 was a colder than average⁶ winter.

⁴ <https://tinyurl.com/vu7ehmwa>

⁵ See section on methodology for details of the scope of this calculation

⁶ <https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2021/2021-a-year-in-weather-a-review>

- 3.6 Fleet mileage increased in 20/21 because the organic waste (food and garden) service increased by 10 miles per day.
- 3.7 Due to changes in the water contracts very little data was available for school water use in the years 2018/19 and 2019/20, and as a result this data is only recorded from 2020/21.
- 3.8 In June 2022 the Government published the latest annual local authority area wide carbon emission data⁷ covering the period from 2005 to 2020. Emissions in the borough of Lewisham have fallen 44% on this measure to 690 ktCO₂e. Lewisham's corporate carbon emissions as measured in this report in 2020/21 represent 1.2% of this total. Lewisham Homes managed properties are outside the scope of this report as domestic carbon emissions. Most Lewisham Homes residents manage their own utility contracts and this data is not available to the Council. The emissions associated with Lewisham Homes managed properties can be estimated at 51,085 tCO₂e⁸. or 7.4% of the borough's total emissions and a combined total of emissions from Lewisham Council owned buildings including domestic properties of 8.6% of the total borough emissions as measured by the Government's data.

4 Wider corporate sustainability achievements in 2020/21

- 4.1 The impact of the pandemic and changes to working practices across Council buildings resulted in significant falls in waste from corporate sites, staff travel, paper consumption, use of stationery and other office equipment. However, the comparative cumulative impact of staff working remotely in terms of energy consumption and the use of other resources at home is not known.
- 4.2 The pandemic significantly accelerated digitisation and the move to technology-based working replacing the use of physical documents, including pay slips which are now issued online.
- 4.3 A new policy of only vegan food served at events on corporate sites was adopted.
- 4.4 The Council's Parks and Open Spaces Strategy published in 2020 included commitments to prioritise procurement and use of electric tools rather than petrol in the parks service and to review planting schemes to promote plants with greater climate adaptation resilience and biodiversity benefits.
- 4.5 A new investment strategy for the Council's Pension Fund was agreed, setting a low carbon mandate.
- 4.6 The Highways department started using 'warm mix' on road resurfacing reducing carbon emissions by 10-15%.
- 4.7 A decision to purchase 100% renewable electricity for corporate sites and schools through the industry REGO certification was made in March 2020.

⁷ <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2020>

⁸ Total number of properties 19,000 <https://www.lewishamhomes.org.uk/about/>; average occupancy 2.46 (Census 2021 data borough population 300,600 and 122,392 households; per capita carbon emissions 2.3 tCO₂e (see footnote 6); % per capita emissions associated with housing 47.52%. Calculation 19,000*2.46*2.3*0.4752= 51,084.95

- 4.8 In 2021 the Council was awarded £3m funding under the Government's Public Sector Decarbonisation Scheme to deliver retrofit work in 7 corporate buildings and 3 schools. The works including heat pumps, insulation, solar panels and upgrades to windows and ventilation completed in 2022/23.

5 Recommendations

- 5.1 Further work is needed to assess the technical and financial requirements of decarbonising the Council's corporate estate, schools, street lighting and fleet. This needs to be delivered as an integral part of the Council's Strategic Asset Management Plan and management of the schools' estate.
- 5.2 Fully understanding the Council's environmental impact requires investment to expand the scope of data collection and data quality. This should include:
- Recording volumes of waste and recycling, including food waste, from corporate sites
 - Improving data on commuting and business travel as part of a new staff travel plan
 - Increasing the numbers of smart meters across Council buildings and schools and the frequency of meter reads where they are not installed
 - Increasing capacity and improving systems in the corporate energy team to improve data collection and analysis
 - Further work is needed to learn from good practice in reporting scope 3 emissions and develop mechanisms across the Council's supply chain including where third parties operate from Council buildings to collect and report data.

Annex 1 Methodology for corporate carbon emissions

The report presents data from the three financial years from 2018/19, 2019/20 to 2020/21. 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.

The report is based on the Greenhouse Gas Protocol⁹ definition of emission scopes

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

Table 4. Greenhouse gas emission inventory definitions

Corporate Sites

The calculation of emissions from corporate sites follows the approach agreed by London Councils' Emission Accounting Working Group which was that all London boroughs would seek to report scope 1 and 2 emissions for buildings within operational and financial control, using the Local Partnerships Tool¹⁰. This is approximately 80% of assets although excludes some significant sources of energy consumption such as leisure centres.

Schools

The data in this report is only for schools that have their energy contracts administered by the council. This represents 80% of Lewisham schools.

Where data is sourced from

- Electricity, gas and water data for corporate sites and schools are all sourced from the Council's energy management software SystemsLink.
- Street Light data was sourced from the Asset Network Manager, Highways and Transport
- Fleet data was provided by the Service Group Manager for Refuse and the Head of Street Environment services, Public Realm, and is an approximation of the length of routes taken by vehicles, as opposed to using mileage logs.

How carbon emissions are calculated

The [Local Partnerships tool](#) developed by the LGA was used to determine the carbon factors to convert consumption data for electricity, gas, water, petrol and diesel to CO2 emissions for each year.

How data is cleansed

Most sites have multiple meters, whether this be for electricity, water or gas. If a particular meter is missing a whole or close to a whole year of data, then unless it can be confirmed

⁹ <https://ghgprotocol.org/>

¹⁰ <https://www.londoncouncils.gov.uk/node/39121> see item 8 para 5.2

that the site is either new or has been closed down, this is assumed to be due to lack of meter reads. In such cases, data has been copied from the most recent year where data is available. Other sites/site meters have been removed from the data set for a variety of reasons; the types of meter removed include:

- Sites where the operation of the building is by a third party and the data is not part of the Council's corporate contracts (including Private Finance Initiative schools and leisure centres)
- Closed sites
- Those with erratic data and low consumption

List of sites featured in this report

2000 Community Action Centre***
Amersham Childrens Centre Annex (Lewisham Portage) ****
Barnes Wallis Community Centre***
Bellingham Gateway Youth and Community Centre
Broadway Theatre***
Brockley Cemetery****
Brockley Grove Depot****
Brockley Rise Centre – CEL
Champion Hall
Children with Disabilities - 45 Bromley Road***
Community Opportunity Services - 200 Kirkdale
Corbett Library, The (Formerly Torridon Road Library)***
Deptford Adventure Playground (Richard MacVicar Adventure Playground)
Dumps Adventure Playground*****
Eros House 1-1a
Evelyn Children's Centre
Evelyn Community Centre
Granville Park*
Granville Park CEL aka Ravensbourne AEI
Grove Park CEL (was Corporate Office)
Grove Park Cemetery Incl. Lodge
Hillcrest Clubroom
Hither Green Cemetery****
Holbeach Probation Services
Home Park Adventure Playground*
Honor Oak Adventure Playground****
Honor Oak Community Centre - 50 Turnham Road***
Honor Oak Youth Club****
Ladywell Cemetery****
Ladywell Cemetery Lodge*
Ladywell Day Centre
Ladywell Early Years Centre
Ladywell Fields Adventure Playground ****
Landmann Way Recycling Centre*
Laurence House
Leaving Care Team - 43 Bromley Road****
Leemore Resource Centre
Lewisham Coroner's Court & Mortuary
Lewisham Crematorium and Chapel
Lewisham Library
Lewisham Registry Office

Lewisham Town Hall – Chambers*
Lewisham Town Hall - Civic Suite
Library Resource Centre
Meliot Centre / Vansittart Street 26***
Mulberry Community Centre
Northover Support / Resource Centre
Riverside Youth Club
Rockbourne Youth Club
Saville Day Centre
Scotney Hall
Sedgehill Community Centre aka HappyDays
Social Inclusion and Recovery Service (Formerly Compass Day Centre)****
Sydenham Centre
TNG Youth and Community Centre
Wavelengths ICT Comms. Room *
Wearside Service Depot
Woodpecker Youth Club

Table 5. List of corporate sites used

* Electricity only

** Gas only

***Electricity and gas only

****Electricity and water only

*****Gas and water only

Abbey Manor College (Ladywell)
Abbey Manor College (Lee)
Adamsrill - Primary School
Addey and Stanhope - Secondary School
All Saints Church of England Primary School
Ashmead Primary School
Athelney Primary School
Baring School - Primary School
Beecroft Garden - Primary School (was Brockley)
Brent Knoll Special School
Brindishe Green (formerly Hither Green) Pri Sch
Brindishe Lee - Primary School
Brindishe Manor - Primary School
Chelwood Nursery School
Childeric - Primary School
Christ the King: Aquinas (was Crossways 6th Form)
Clyde Nursery School
Coopers Lane Primary School
Dalmain Primary School
Deptford Park Primary School
Downderry Primary School
Drumbeat School And ASD Service (was Meadowgate)
Edmund Waller Primary School
Elfrida Primary School
Eliot Bank Primary School
Fairlawn Annexe - Primary School

Fairlawn Primary School
Forster Park Primary School
Good Shepherd Catholic Primary School
Gordonbrock Primary School
Greenvale School
Grinling Gibbons Primary School
Haseltine Primary School
Holbeach - Primary School
Holy Cross RC - Primary School
Holy Trinity Sydenham CE – Primary School
Horniman J & I School - Primary School
John Ball J & I School - Primary School/Nursery
John Stainer - Primary School
Kelvin Grove - Primary School
Kender - Primary School
Kilmorie Primary School & PDC
Lucas Vale - Primary School
Marvels Lane - Primary (Junior) School
Myatt Garden - Primary School
New Woodlands School
Our Lady & St Philip Neri RC - Primary School
Perrymount - Primary School
Rangefield - Primary School
Rathfern - Primary School
Rushey Green - Primary School
Sandhurst - Junior and Infants School
Sir Francis Drake - Primary School
St Augustines RC - Primary School
St George's CE Primary School (was Christ Church)
St James Hatcham CE - Primary School
St John The Baptist CE - Primary School
St Josephs RC - Primary School
St Margaret's Lee C of E - Primary School
St Mary Magdalen RC - Primary School
St Mary's CE - Primary School
St Michaels Sydenham CE - Primary School
St Saviours RC - Primary School
St Stephens CE - Primary School
St William of York RC - Primary School
St Winifreds Catholic Primary School
Stillness - Junior and Infants School
Sydenham School, Dartmouth Road
Torridon - Junior and Infants School
Trinity School Annex
Watergate School

Table 6. List of school sites used

* Electricity only

** Gas only

***Electricity and gas only

****Electricity and water only

*****Gas and water only