

South Cambridgeshire District Council
Annual Greenhouse Gas Emissions Account 2019-20

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1. Introduction

These accounts have been compiled in order to provide a better understanding of the impact of the Council's estate and operations on climate change, and to inform action to mitigate this impact by reducing emissions. They have been drawn up according to the [Environmental Reporting Guidelines](#) issued by the Government's Departments for Environment, Farming and Rural Affairs (DEFRA), and Business, Energy and Industrial Strategy (BEIS), updated March 2020.

The guidelines provide procedures and principles for accounting and reporting environmental impacts drawn from the internationally recognised Greenhouse Gas Protocol Corporate Accounting and Reporting Standard from the World Resources Institute and World Business Council for Sustainable Development, known as the "GHG Protocol

Corporate Standard”. These principles are that the accounts should be relevant, quantitative, accurate (insofar as is practical), complete (with any exclusions specified, disclosed and justified), consistent, comparable and transparent.

Under the GHG Protocol, emissions are defined in three different Scopes. Scope 1 is direct GHG emissions from activities owned or controlled by the organisation. Scope 2 is indirect emissions associated with consumption of purchased electricity, heat, steam and cooling. Scope 3 is indirect emissions that are a consequence of the organisation’s actions, but which occur at sources not owned or controlled by the organisation.

2. GHG Emissions from the Council’s Estate and Operations

Table 1: Overall GHG emissions for 2019-20 showing the percentage change from the baseline year

	GHG Emissions (tCO ₂ e) 2019-20	GHG Emissions (tCO ₂ e) 2018-2019 (baseline year)	Percentage change from baseline year
Scopes	2019-20	2018-19	
Scope 1 (direct emissions)	1432	1360	+ 5.3%
Scope 2 (indirect emissions, electricity)	348	383*	-9.1%
Scope 3 (indirect emissions, other)	139	133	+4.5%
Total gross emissions	1919	1876	+2.3%
Population ¹	159,086	157,519	+1.0%
Intensity measurement (tonnes of CO ₂ e per person)	0.01206	0.01190	+1.0%
Electricity generated from Council owned sources and exported to the grid	2	0	-
Green Tariff	96	0	-
Carbon offsets	0	0	-
Total Net Emissions	1821	1876	-2.9%

*scope 2 emissions figure is different to that reported in 2018-19 due to the baseline recalculation of both the footway lamp and Waterbeach’s electricity data

¹ Based on Office for National Statistics 2019 Mid-Year Population Estimates released April 2020:

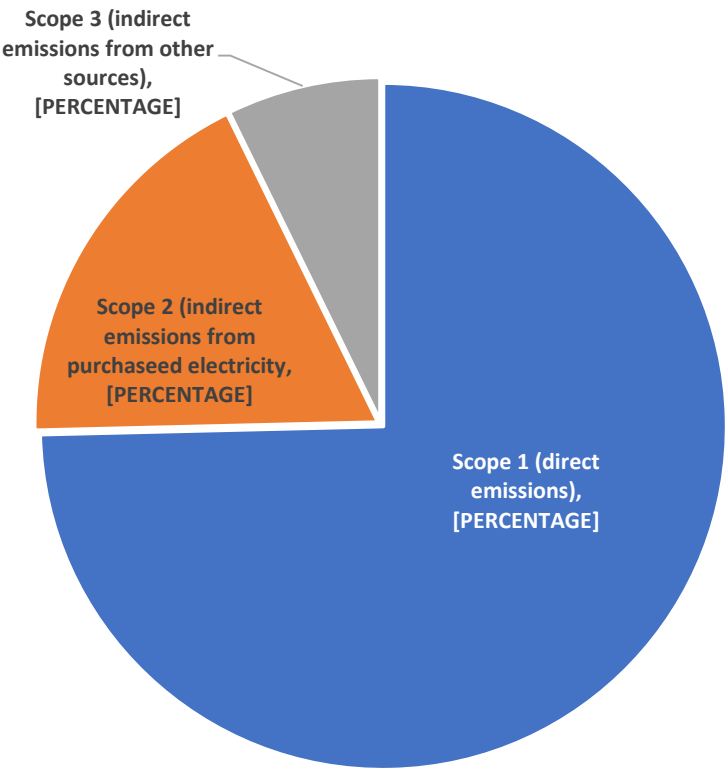
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>

Table 2: Greenhouse Gas Emissions for 2019-20 – by scope showing the percentage change from the baseline year

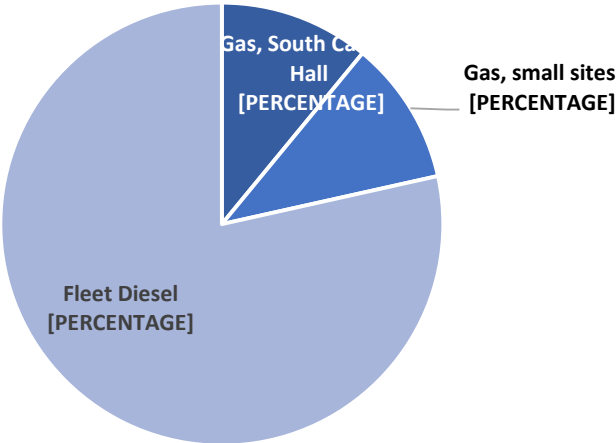
	GHG Emissions (tCO ₂ e) 2019-20	GHG Emissions (tCO ₂ e) 2018-2019 (baseline year)	Percentage change from baseline year
Scope 1			
Gas consumption	308	271	+13.7%
Fleet	1124	1089	+3.2%
Process emissions	n/a	n/a	-
Fugitive emissions	n/a	n/a	-
Total Scope 1	1432	1360	+5.3%
Scope 2			
Purchased electricity	348	383*	-9.1%
Total Scope 2	348	383*	-9.1%
Scope 3			
Business Travel	139	133	+4.5%
Transmission and Distribution losses	Not included	Not included	-
Employee commuting	Not included	Not included	-
Procured goods and services	Not included	Not included	-
Waste Disposal	Not included	Not included	-
Total Scope 3	139	133	+4.5%
Total gross emissions	1919	1876	+2.3%

*scope 2 emissions figure is different to that reported in 2018-19 due to the baseline recalculation of both the footway lamp and Waterbeach's electricity data

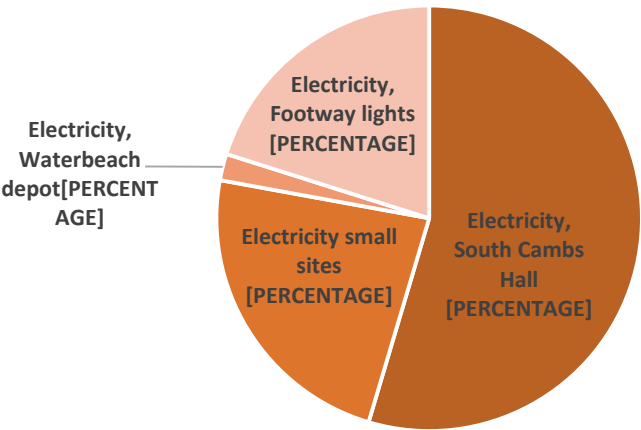
GHG emissions from SCDC Estate and Operations 2019-20
1919 tCO₂e



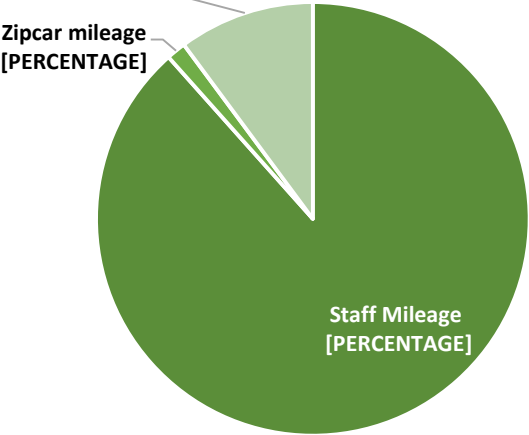
Scope 1 (direct emissions), 1432 tCO₂e



Scope 2 (indirect, electricity), 348 tCO₂e



Members' mileage Scope 3 (indirect, other), 139 tCO₂e



3. About the Council

South Cambridgeshire District Council is a non-metropolitan district authority and is responsible for providing a range of services to residents of South Cambridgeshire, visitors to the district, and businesses and other organisations based in the district. Services include housing, refuse and recycling collections, licensing, planning and building control, Council Tax collection, and environmental health services. The Council serves a population of 159,086 living in 106 parishes and settlements, has 45 elected Members; and employed 573 members of staff as at 31 March 2020. Further information about the Council can be found on our website at www.scambs.gov.uk.

4. Reporting Period

1 April 2019 – 31 March 2020.

5. Approach

We have followed Government guidance, published by Defra at <https://www.gov.uk/guidance/measuring-and-reporting-environmental-impacts-guidance-forbusinesses>.

6. Organisational Boundary

We have defined our organisational boundary following the Financial Control approach which means we have included operations which the Council owns and controls. Further detail on which operations or activities have been included within our organisational boundary for the purposes of compiling this greenhouse gas report is provided under 'Operational Scopes' below.

7. Operational Scopes

We have included Scope 1 and Scope 2 emissions for all properties and vehicles that we fully own and control and for properties that we lease from others, where the Council is delivering a service.

We reported Scope 3 emissions where we have access to comprehensive and reliable data; and where we have a degree of control over the operation/ activity in question. See the table below for details:

Table 4: Rationale for Inclusion and Exclusion of Emissions.

Source of Emissions	Included in reporting?	Reason for exclusion where applicable
Scope 1 (Direct)		
Gas consumption in buildings we own and control	Yes	This includes our main office buildings, our three hub offices and our sheltered housing community rooms.

Gas consumption in buildings we lease to others	Partially	We have only included emissions arising from energy used in the communal areas of some of the buildings that we lease out (energy used in communal areas is provided and paid for by the Council). We have not included data on energy used in Council housing, Ermine Street Housing (the Council's private sector housing company), or in commercial buildings owned by the Council.
Gas consumption in buildings we lease from others	no	The Waterbeach Depot is the only building we lease from others. No gas is consumed on these premises.
Fuel consumption in owned transport	yes	Includes Shared Waste Services transport, eg refuse vehicles, operating in South Cambridgeshire; excludes Shared Waste Services transport operating in the City Council.
Process emissions	No	Not applicable
Fugitive emissions, eg from air conditioning units	No	Excluded due to difficulty and/or cost of obtaining data
Scope 2 (Indirect, energy)		
Purchased electricity; in buildings we own, occupy and control	Yes	This includes our main office buildings, our three hub offices and our sheltered housing community rooms.
Purchased electricity in buildings we lease to others	partially	We have only included emissions arising from energy used in the communal areas of some of the buildings that we lease out (energy used in communal areas is provided and paid for by the Council). We do not have access to data on energy used by our tenants.
Purchased electricity in buildings we lease from others	Yes	We have included 50% of the purchased electricity for Waterbeach depot, the remaining 50% will be included in Cambridge City Council's GHG emissions report
Purchased electricity used in street lighting owned by the Council	Yes	1,796 streetlights

Scope 3 (indirect, other)		
Purchased goods and services	No	Excluded due to difficulty and/or cost of obtaining data
Business travel	Yes	This includes mileage claimed by staff and Members; and travel using the Zipcar.
Commuter travel	No	Excluded due to difficulty and/or cost of obtaining data
Waste disposal	No	Excluded due to difficulty and/or cost of obtaining data
Water usage	No	Excluded due to difficulty and/or cost of obtaining data
Outsourced activities	No	

8 Conversion/ Emissions Factors Used

The emissions factors used to calculate the emissions in this Greenhouse Gas Report are those provided by BEIS (Department for Business, Energy & Industrial Strategy) and Defra (Department for Environment Food & Rural Affairs) titled: 'UK Government GHG Conversion Factors for Company Reporting' which is available at: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020>

9. Geographical Breakdown

All of our operations and activities are carried out in the UK.

10. Baseline Year

1 April 2018- 31st March 2019

11. Base Year Recalculation Policy

For consistent tracking of performance over time, the Council may need to recalculate the baseline year to compare current emissions with historic emissions. The reasons for change are documented in Part 9 of the Guidance on how to measure and report your greenhouse gas emissions provided by DEFRA. For example, changes in calculation methods or improvements in the accuracy of emission factors or activity data that result in a significant impact on the base year emissions data. Since the 2018-19 report was published, a survey identified the number of footway lamps in use to be 1796, not 1677 as reported. Also, consumption estimates changed when the Council moved changed to a new Contractor in 2020. The baseline has also been recalculated at 50% of the original figure for the purchased electricity at Waterbeach as the bill is shared with Cambridgeshire City Council. For these reasons, the 2018-19 baseline consumption figure was recalculated to

give 82 tCO₂e for the streetlamp data and 11 tCO₂e for Waterbeach's electricity data. As a consequence, the total GHG emissions for scope 2 has changed to 383 tCO₂e. These new figures have been restated for 2018-19.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf

12. Intensity Measurement

We have included an intensity ratio of 'tonnes of CO₂e per resident of South Cambridgeshire, which is based on mid-year population statistics, produced in April 2020.

The dataset is at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>

13. External Assurance Statement

The Authority's Internal Audit service have had opportunity to review the reported emissions figures, supporting calculations and sample test available source data.

It should be noted that, at the time of reporting, Internal Audit have been unable to validate the actual consumption figures for the following data sets as the reported usage figures are based upon estimates or supplier quotations:

- Scope 1 - Gas (small sites)
- Scope 2 - Electricity (small sites), Electricity (Waterbeach) and Footway Lighting

Additionally, the Offsets data for avoided carbon emissions have not been validated by Internal Audit.

As a result, Internal Audit have provided limited assurance over the accuracy of the calculations and reported emissions figures in the documents provided, assuming the source data is accurate.

A separate Internal audit report detailing their work, together with any audit recommendations for improving the reporting process is due to be issued shortly and these recommendations will be incorporated in the reporting process for 2020/2021.

14. Carbon Offsets

We have not purchased any carbon credits.

15 Purchased Green Tariffs – Reduction in tonnes of CO₂e per year

Cambourne's purchased green tariff came into effect on 1 Oct 2019 and the reduction in tonnes of CO₂e per year has been included in the total net emission figure.

16. Amount of Electricity Generated from Owned or Controlled Sources

The solar array on the Waterbeach depot started exporting electricity in March 2019. We have included renewable electricity exported to the grid from the PV array in the total net emission figure. The amount included is the deemed export figure of 50% which is then halved again to account for the 50% share with Cambridge City Council.

17. Amount of Heat Generated from Owned or Controlled Sources

South Cambs Hall benefits from a roof mounted solar thermal installation. Accurate figures for heat generated are unavailable at the present time but this is currently being investigated by our Green Energy Investment Officer. As solar thermal panels only 'generate heat' it will in turn mean that the heat drawn by the gas boilers will be less than if solar thermal wasn't available.

For further information about this report, please contact:

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