

Exeter City Council's Organisational Footprint 2023/24

The Centre for Energy and the Environment (CEE) at the University of Exeter has produced Exeter City Council's greenhouse gas (GHG) inventory for each of the past 6 years. The inventory is updated here for the 2023/24 financial year.

Exeter City Council (ECC) organisational GHG emissions in 2023/24 for all scopes totalled **39,327 tCO₂e** (see Table 1).

Table 1: Exeter City Council total Greenhouse Gas Inventory results 2023/24. Scope 3 categories denoted in red.

Category	Scope 1	Scope 2	Scope 3	Offset	Total
1. Buildings (exc. housing)	1,049	1,146	5,551		7,746
1.1 Corporate Estate	366	307	159		832
1.2 Leisure Centres	684	405	244		1,333
1.3 Other Non-Domestic		434	142		576
<i>1.4 Waste from Buildings</i>			<i>3</i>		<i>3</i>
<i>1.5 Homeworking Energy</i>			<i>173</i>		<i>173</i>
<i>1.6 Construction and Maintenance</i>			<i>897</i>		<i>897</i>
<i>1.7 Leased Out</i>			<i>3,933</i>		<i>3,933</i>
2. Social Housing	11,467	2,946	8,816		23,229
2.1 Operational emissions	11,467	2,946	2,858		17,270
<i>2.2 Construction and Maintenance</i>			<i>5,958</i>		<i>5,958</i>
3. Transport	688		612		1,300
3.1 Own Vehicles	688		168		856
<i>3.2 Grey Fleet</i>			<i>16</i>		<i>16</i>
<i>3.3 Business Travel</i>			<i>10</i>		<i>10</i>
<i>3.4 Commuting</i>			<i>417</i>		<i>417</i>
4. Procurement			7,839		7,839

Category	Scope 1	Scope 2	Scope 3	Offset	Total
4.1 Goods			3,444		3,444
4.2 Services			4,394		4,394
5. Offsets	-155			-631	-786
5.1 Exported Renewable Energy				-631	-631
5.2 Land Use Change	-155				-155
Total (entire footprint)	13,050	4,092	22,817	-631	39,327

Emission from all Scopes have increased by 255 tCO₂e (0.7%) from 2022/23. Trends in emissions for the total footprint from 2018/19 to 2023/24 are shown in by Scope, and in Figure 2 by emissions category. The 7,196 tCO₂e reduction from last year's published inventory is due to more accurate data on leased assets provided by ECC which have been applied across the restated timeseries in the figures below.

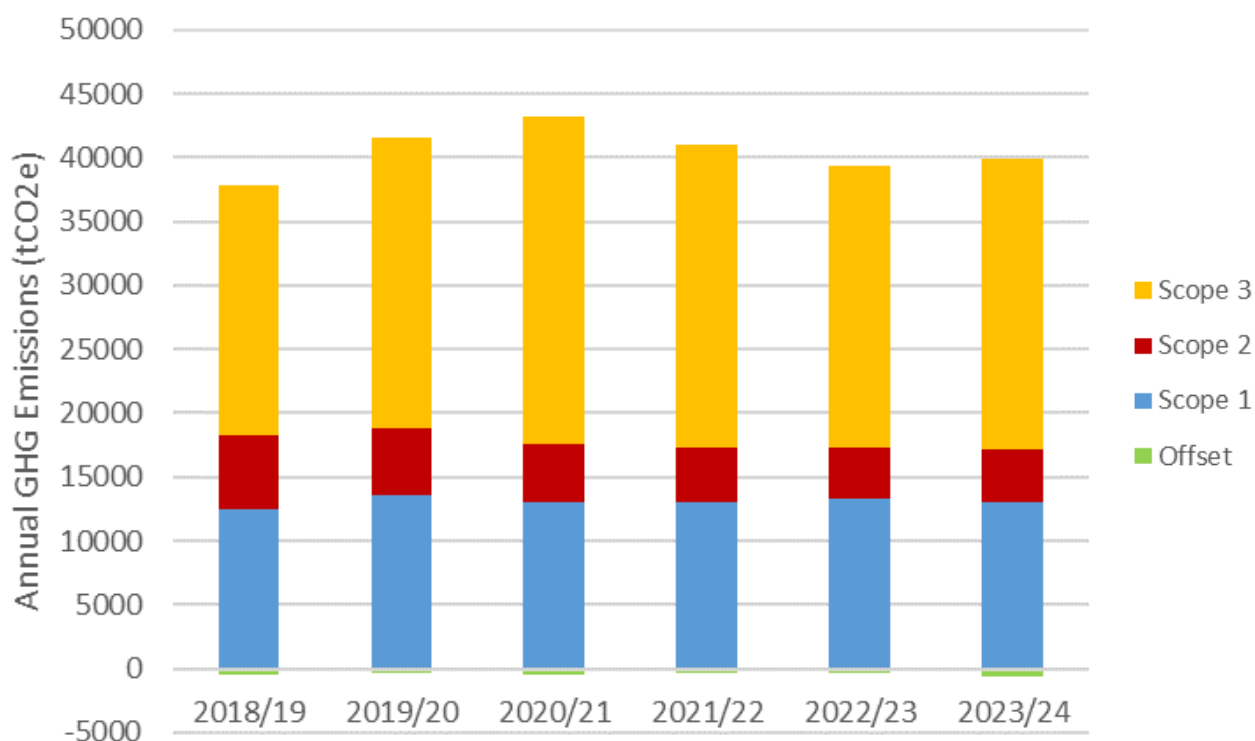


Figure 1: Exeter City Council total greenhouse gas emissions by scope

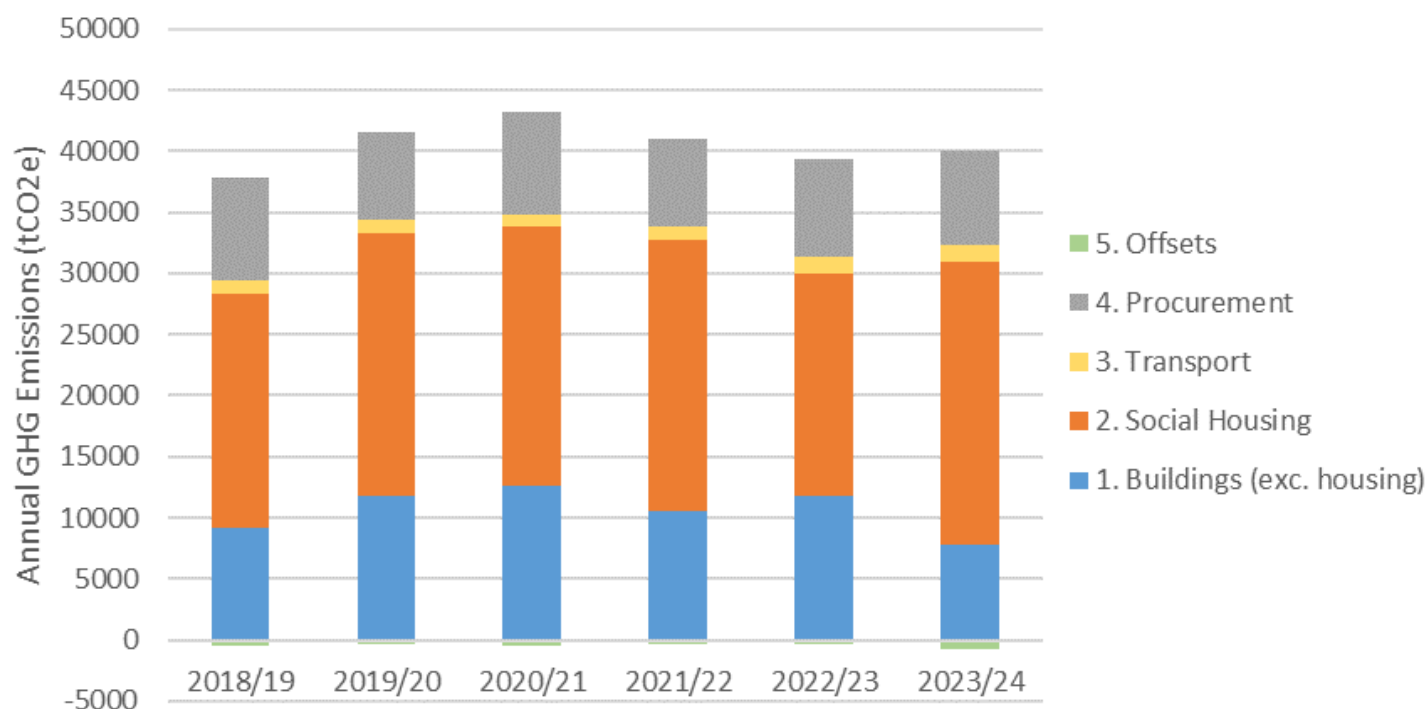


Figure 2: Exeter City Council total greenhouse gas emissions by category

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Non-domestic Buildings

Emissions from non-domestic buildings have decreased significantly to their lowest tCO₂e in any recorded year. This reduction is due to several factors, including improvements to the energy efficiency of buildings, fewer emissions associated with Scope 3 construction and maintenance due to completion of St Sidwell's Point in April 2022, as well as the decarbonisation of the electricity grid network.

2023/24 Scope 1 and 2 emissions total 2,740 tCO₂e with 49% emitted from leisure centres, 30% from corporate buildings and 21% from other non-domestic properties. Exeter City Council's most carbon intensive leisure centre, Riverside Leisure Centre, has seen a 29% reduction in emissions since 2022/23 due to better building management, including refinement of heating controls. Leisure centres represent the greatest potential for decarbonisation across ECC's corporate estate.

The largest greenhouse gas emitter in this sector is the Royal Albert Memorial Museum (RAMM). This site has reduced by 66 tCO₂e since 2022/23 due to better controls of the heating and cooling system as well as reprogramming of the building management system resulting in lower fuel consumption.

Social Housing

2023/24 emissions from City Council's social housing (all scopes) are estimated at 23.2 ktCO₂e, an increase of 5 ktCO₂e from 2022/23. In 2023/24, 74% of emissions are due to domestic energy consumption, which is estimated using EPC data. Since 2012, the City Council has been retrofitting our social housing stock with low carbon technology and fabric upgrades to improve the energy efficiency of homes.

The remaining 26% (5,958 tCO₂e) is due to construction and maintenance emissions, which have been estimated using a high-level spend-based method. The increase in construction emissions in 2023/24 are due to higher expenditure being assigned to housing costs in this year.

Transport

There has been a slight increase in transport emissions due to an increase in commuting since 2022/23. This is expected to increase further as staff return to the office two days a week. The largest contributor to transport emissions are the City Council's own vehicles, including fleet and plant equipment, emitting 856 tCO₂e in 2023/24 (Scopes 1 & 2).

Procurement

Emissions from purchased goods and services are calculated using a spend-based method, multiplying spend by the government's emission factors (*UK GHG Conversion Factors*). Emissions are therefore linked to procurement spend on goods and services each year.

Offsets

Exeter City Council have a 3.4 MWp solar photovoltaic (PV) array located across multiple sites which deliver carbon savings as their output replaces alternative fossil fuel-based energy sources. The solar generation used in City Council buildings is accounted for as the energy consumption in these buildings is reduced. 'Offsets' in figures 1 & 2 describes only the exported generation which therefore has the potential to offset carbon emissions elsewhere, as well as CO₂ sequestration from trees planted.

Exported renewable energy has more than doubled since 2022/23. This is likely due to additional generation from the first full operational year of Water Lane Solar Farm, expansion of solar PV on the social housing stocks, and the addition of land use change (afforestation) into the calculations.