

Suffolk County Council
Corporate Carbon Footprint 2023-4
Public Statement

Context

In March 2019, the Council declared a Climate Emergency and its ambition to achieve net zero carbon emissions for its own operations by 2030, and to work with partners toward the aspiration of Suffolk achieving carbon neutrality by 2030.

An annual update on progress is produced. This paper summarises the update for the period 1st April 2023 - 31st March 2024.

The full report can be found in the papers for the Cabinet meeting on 28th January 2025, [Agenda Item 6](#).

Please note that we continually seek to improve the accuracy, and expand the range, of our monitoring processes. The figures in this report were based on the best data available at the time, but may not match the figures used in later reports, if more accurate or complete data has become available in the meantime. Figures from previous years have been updated where applicable, in line with the best available information at the time of this report's production.

Classifying emissions

Emission releasing activities are classified into three ‘scopes’ which are defined in the internationally accepted GHG Protocol and are described in the table below. Scope 3 emissions are more difficult to account for, because the required data often lies with the supply chain in other organisations. As a result, there is a higher degree of estimation in the Scope 3 category.

Scope	Definition
1: Direct Emissions (Energy)	Emissions that occur directly from sites or assets owned by the organisation. e.g. gas boilers; fleet vehicles
2: Indirect Emissions (Energy)	Emissions that occur elsewhere from energy purchased for use in the organisation’s sites or assets e.g. electricity, heat or steam
3: Indirect Emissions (Other)	All Indirect emissions that occur within the value chain as a result of the organisation’s activity, but are not directly owned by the organisation. e.g. employee commuting, purchased goods & services, waste disposal

Figure 1 Definitions of the Scopes used within the footprint

Standard conversion factors have been used to assess the carbon footprint of each activity and building. The conversion factors are published by DEFRA on an annual basis and reflect the carbon intensity of a range of carbon sources.

The footprint has been calculated following the approach set out by the GHG Protocol.

Suffolk County Council’s Carbon Footprint

	2019/20	2020/21	2021/22	2022/23	2023/24
Scope 1	6,971	7,054	7,119	5,035	4,042
Scope 2	9,290	7,783	6,814	4,995	5,216
Scope 3	17,874	15,439	17,335	16,637	17,137
Total	34,135	30,276	31,268	26,667	26,395

Figure 2 Measured Carbon Footprint (tonnes CO₂e).

What is Included

Figure 2 summarises emissions covered by this footprint which come from:

- Energy, refrigerant and water use across all buildings including non-academy schools
- Waste produced in our five main offices
- Electricity used by streetlighting the Council is responsible for
- Fuel used in Council vehicles
- Fuel use in planes, trains and private cars for travel on council business
- Home to school transport
- Fuel use by staff for commuting and working from home.

N.B. Only a subset of Scope 3 emissions is included, where data is available. Supply chain emissions are not reported here. These are estimated to be 9 times as large as the reported emissions.

Understanding the figures

Figures for previous years have been updated as we have sourced better data. This includes the inclusion of energy use at highways depots, and emissions from the supply and distribution of all fuels. Additions have been applied across all years, so that trends reflect actual changes.

The emissions reported within the footprint relate to around 10% of the total emissions associated with the Council's operations. The figures reported include most of the Council's scope 1 and 2 emissions but only a very small proportion of the 'scope 3' emissions associated with products and services purchased.

The drop in 20/21 largely reflects the impacts of the pandemic on working practices.

Current forecast for 2030

Figure 3 below forecasts progress towards net zero for the emissions in figure 2. It shows the **annual budget cap** (grey bars) necessary to achieve net zero for these emissions by 2030 with a linear year on year reduction, and the **forecast emissions** given projects in place (green/ orange lines).

In 2022 the Council moved to a 100% renewable energy supplier, supported by Renewable Energy Guarantees of Origin (REGO), which provide transparency about the source of renewable electricity generation. Fig. 3 shows the decarbonising impact of the Council moving to a renewable electricity supply (green line), but also shows the emissions associated with the grid average carbon intensity for electricity used (orange line). The renewable energy tariff still draws electricity from the grid, but acts as a driver for more rapid grid decarbonisation.

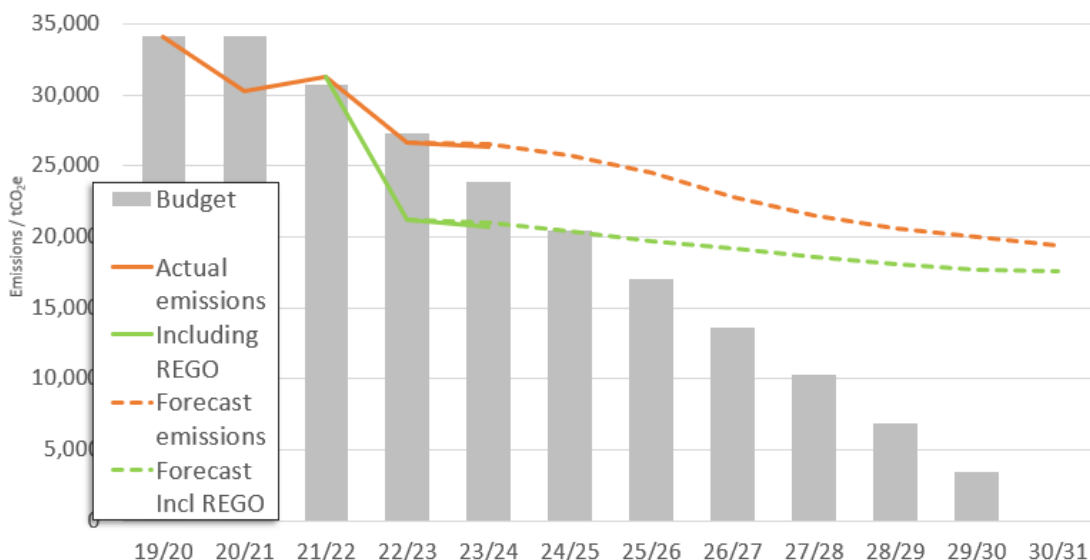


Figure 3: Net Zero Budget and Forecast Pathway

Overall, this shows a reduction of 23% on the 19/20 baseline.

The 2030 forecast, shown in dotted lines in Figure 3, is for a reduction from baseline of 43% (or 48% accounting for REGO). These forecasts only take account of savings where we have a clear and funded plan for achieving them, so should represent a minimum achievable reduction. It is highly unlikely based on the current position that sufficient additional reductions will be identified to be fully net zero by 2030.

Scope 1 & 2 Emissions

Scope 1 and 2 covers the emissions where the Council has the most control. The largest areas within this grouping are:

Scope 1: Consumption of gas, oil, wood and refrigerants across Council owned buildings (including schools, libraries and fire stations); Consumption of fuel within pool cars and fleet vehicles, including fire.

Scope 2: Electricity use across Council owned buildings (including schools, libraries and fire stations) and Council owned streetlighting and traffic lights.

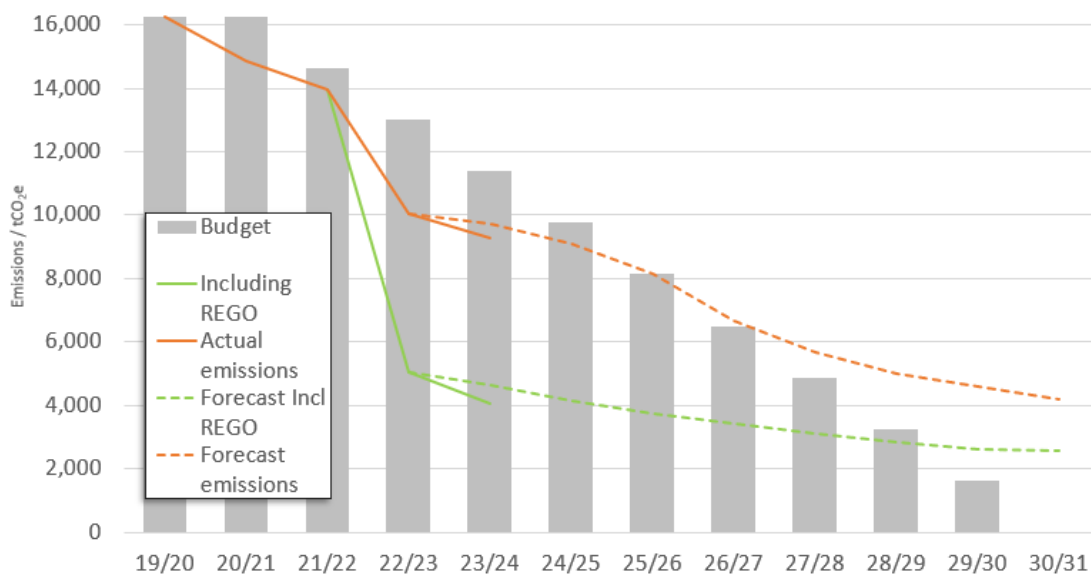


Figure 4: Scope 1 & 2 Budget and Forecast Pathway

Figure 4 shows the actual and projected emissions from Scope 1 & 2 emissions, compared to a linear pathway to zero emissions.

Emissions from these two scopes have reduced by 43% since the baseline year (75% accounting for REGO). This largely results from efficiency improvements to streetlighting and buildings, and decarbonisation of the grid nationally.

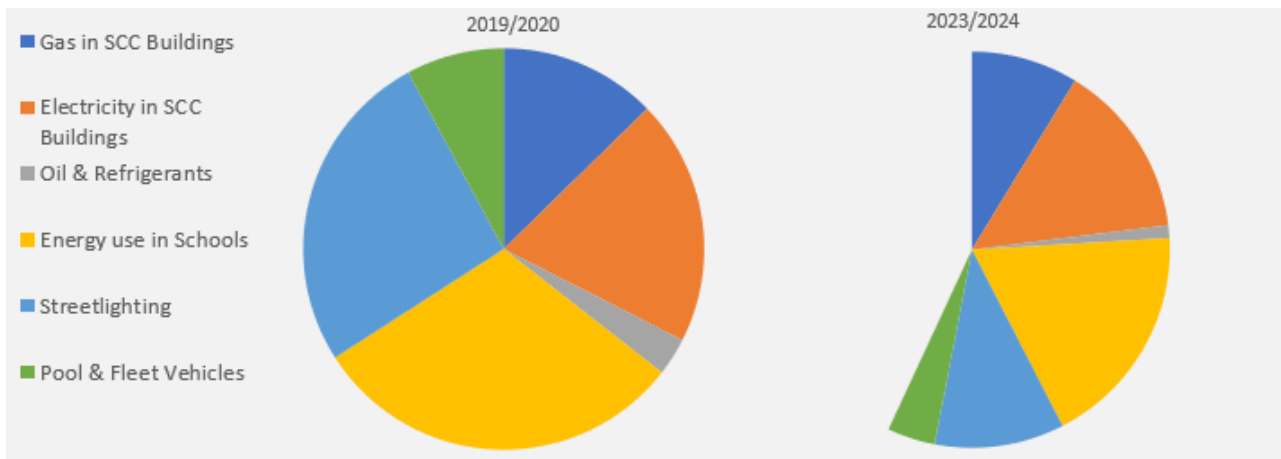


Figure 5: The Changing Make-up of Scopes 1&2

Building Management Systems are now in place across 17 of the highest consuming sites, substantially reducing energy use, especially gas, and making a significant contribution to avoided energy costs of over £500,000 for the year. 114 sites now have solar installations which collectively generated 2.2GWh of electricity over the year. The pool car fleet is fully electric, and a substantial portion of the fire fleet has been electrified.

Scope 3 Emissions

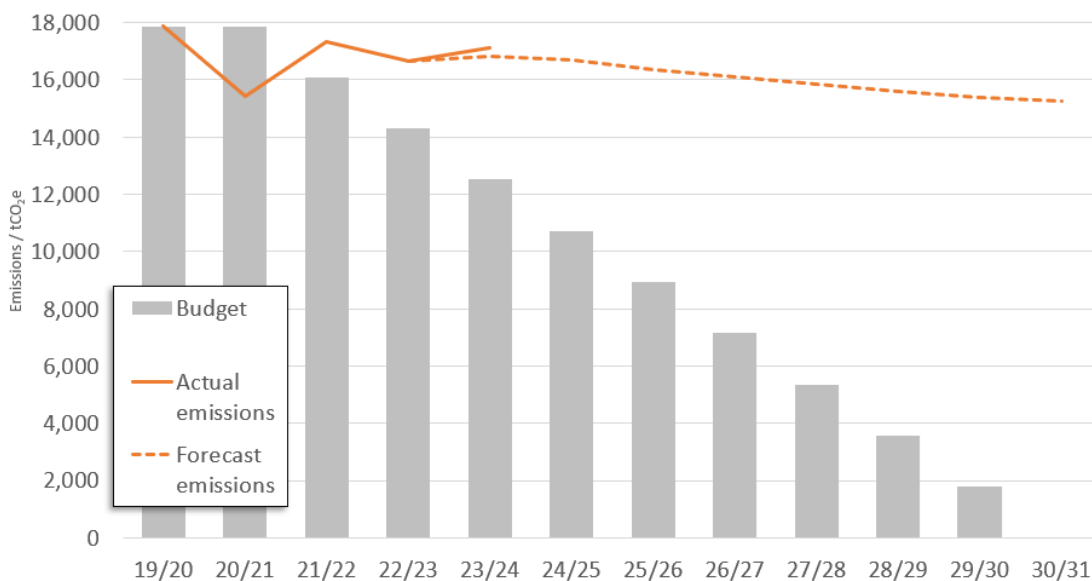


Figure 6: Scope 3 Budget and Forecast Pathway

Figure 6 shows the actual and projected emissions from Scope 3 emissions, compared to the proportional share of the 2030 budget. Scope 3 covers the emissions where the Council has less control. The largest areas within this grouping are travel in staff vehicles, commuting, home working, and home to school transport. Not reported here is the bulk of the supply chain emissions, which likely represents 91% of the total footprint, but we are unable to capture accurately.

Reported emissions within Scope 3 have reduced by 5% since baseline, but have increased by 2% on the previous year. The main factor behind this increase is not any change in our activities, but an increase in the standard conversion factor for emissions from bus travel. There has also been an increase in mileage within staff vehicles, driven by increased demand for care services.

Emissions within Scope 3 are both harder to influence, and harder to monitor accurately. The figures for Scope 3 emissions should be treated with a degree of caution. In particular, a high proportion of the figures are based on estimated data that we are unable to update each year. Consequently, the figures reported here do not mean there has not been a greater (or lesser) reduction in emissions.

SCC staff have a key role to play in reducing the council's impacts through the decisions they can make – in particular around travel, and contract management, but also a host of behaviours from recycling to diet. Staff engagement is also key so that the positive impacts of SCC's transition are maximised by inspiring staff to adopt more sustainable behaviours outside work.

Work has continued over the past year to increase staff understanding of climate change and its impacts, and to encourage positive behaviours within the organisation. Staff complete a Climate Change Awareness course as part of the annual mandatory training programme and a network of staff champions with representatives across the council help to disseminate key messages and bring forth issues and opportunities to help the organisation transition to more sustainable ways of working.

In June 2024 we ran a staff engagement campaign under the banner of Eco Month. This included a full programme of lunchtime talks, group activities and challenges such as the Go Eco Challenge where staff committed to try out a lower carbon commute for the month.

Identifying Emissions in the Supply Chain

The emissions associated with the goods and services we purchase make up a significant portion of our total footprint, an estimated 90-95%. These emissions are difficult to account for because the required data lies with other organisations.

Currently, our reporting on the purchased goods and services we buy is limited. To improve understanding of our supply chain emissions, we are undertaking a comprehensive analysis of our finance and procurement data to provide a breakdown of emissions by supplier and activity. This will enable identification of hotspots, opportunities for financial and carbon savings, and can provide a baseline for monitoring progress going forward.

To meet our net zero target, we need our suppliers to work with us. Our Climate Change Commercial Ask asks our suppliers to measure their carbon emissions, have a carbon reduction plan and set a net zero target. Currently, 40% of our top 100 suppliers by spend have a carbon reduction plan published on their website. During 2023/24, support has been provided to our commissioning staff to align new contracts with SCC's Climate Change

Commercial Ask, and conversations had with some suppliers to understand progress towards net zero.

We will be reviewing our Sustainable Procurement Policy and Climate Change Commercial Ask to ensure clarity, strengthen requirements in line with our 2030 goal, and to explore what support we can provide to our suppliers. Any revision to the approach will continue to be guided by what can be provided by the market without unduly prejudicing local SMEs or restricting the Council's capacity to secure best value.

Emissions Breakdown (tonnes CO₂e) ^(a)

Scope (b)	Category	2019/20	2020/21	2021/22	2022/23	2023/24
1	SCC Vehicles (Diesel)	1,170	745	804	760	585
1	SCC Vehicles (Petrol)	116	34	66	87	49
1	SCC Buildings (Gas & Oil) (3)	2,126	2,565	2,592	1,875	1,439
1	Schools (Gas & Oil) (4)	3,124	3,266	3,223	2,137	1,814
1	Refrigerants	(5) 434	444	434	176	154
SCOPE 1 TOTAL		6,971	7,054	7,119	5,035	4,042
2	SCC Buildings (Electricity)	3,220	2,713	2,452	2,132	2,321
2	Schools (Electricity)	1,811	1,260	1,198	1,093	1,173
2	Street & Traffic lights	4,259	3,810	3,164	1,770	1,723
SCOPE 2 TOTAL		9,290	7,783	6,814	4,995	5,216
3	Libraries (Gas & Electricity) (6)	394	303	336	316	273
3	Business travel in staff vehicles	1,284	493	1,198	1,607	1,787
3	Air and Train Travel	45	41	40	40	48
3	Staff Commuting (7)	3,762	0	2,037	2,557	2,621
3	Home working (7)	0	2,818	1,118	1,108	1,205
3	Water	174	121	61	67	57
3	Waste	5	5	5	5	5
3	School transport (8)	8,896	8,758	8,692	8,218	8,684
3	Electricity T&D (9)	805	679	614	468	461
3	WTT for all fuels (10)	2,508	2,220	3,234	2,251	1,995
SCOPE 3 TOTAL		17,874	15,439	17,335	16,637	17,137
TOTAL (11)		34,135	30,276	31,268	26,667	26,395

Notes

1. All emissions are shown in terms of tonnes of Carbon Dioxide equivalent (tCO₂e), which allows all greenhouse gas emissions to be accounted for in a comparable manner.
2. Emissions are grouped by scope, according to the Greenhouse Gas Protocol.
 - Scope 1: Direct Emissions
 - Scope 2: Indirect emissions from purchased electricity, heat or steam
 - Scope 3: Other Indirect emissions
3. SCC Buildings includes all properties where the Council pays the energy bills, apart from LA maintained schools and libraries which are shown separately. Figures also include a small value for wood fuel.
4. Figures also include a small value for wood fuel.
5. Refrigerant Figures for 19/20 are estimated where real data is not available.
6. Libraries are now reported within Scope 3 in line with the GHG Protocol guidance for Leased Assets under the Operational Control approach.
7. Commuting & homeworking Figures are based on a travel to work survey and assumptions around homeworking patterns.
8. In the absence of accurate data across contracts, estimates of fuel use for school transport have been extrapolated from a more detailed estimate of one area of the county.
9. Emissions associated with the transmission and distribution of electricity through the national grid.
10. Emissions associated with the production, transportation and transformation of all fuels.
11. The scope of these emissions relates to around 5% of the Council's expenditure (revenue and capital) and is probably around 10% of the total footprint. Most fossil fuel use and purchased electricity (scope 1 and 2 emissions) is included but only a very small proportion of the 'scope 3' emissions due to a lack of available data on emissions from the supply chain.