

## **Suffolk County Council Corporate Carbon Footprint 2021-2 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 is a summary of the key information included in that report.

The full report presented to Cabinet can be found in the papers for the Cabinet meeting on 24<sup>th</sup> January 2023, [Agenda Item 9](#).

Please note that we continually seek to expand the range, and improve the accuracy 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.

## 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: Energy – direct	Emissions that occur directly from sites or assets owned or controlled by the organisation, e.g., gas boilers at own premises, fleet vehicles.
2: Energy - indirect	Emissions from purchased energy generated elsewhere such as electricity, heat or steam.
3: Other - indirect	Emissions that occur due to the organisation's activities / products / services, but that are not directly owned or controlled by the organisation such as travel in employee-owned vehicles and on public transport, purchased goods and 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
Scope 1	7,472	7,846	7,574
Scope 2	8,293	6,870	6,023
Scope 3	9,767	5,016	7,947
<b>Total</b>	<b>25,533</b>	<b>19,732</b>	<b>21,543</b>

*Figure 2 Measured Carbon Footprint (tonnes CO<sub>2</sub>e).*

**N.B.** vast majority of scope 3 not included.

### What is included

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

- buildings' energy use including non-academy schools
- water and refrigerant use and waste produced in our five main offices
- electricity used by streetlights the Council is responsible for
- fuel used in Council vehicles
- staff fuel use in their own vehicles when commuting and travelling on Council business
- fuel used to provide the home to school transport service.

## Understanding the Figures

The low point in 20/21 is largely due to the changing working practices during the pandemic. The drop in 21/22 from the baseline year is mainly due to ongoing take up of home working and on-line meetings as well as more efficient streetlighting (see Annex 1 for more information).

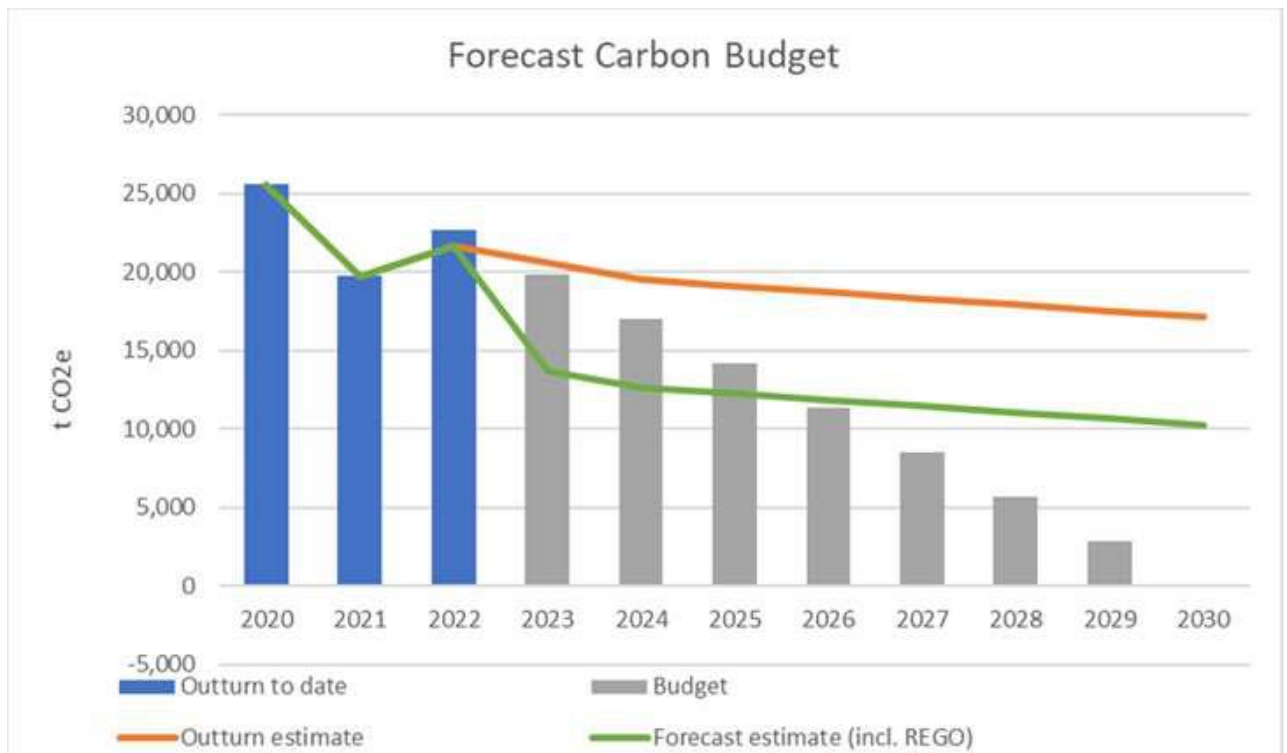
These reported emissions are roughly estimated to be in the region of 10% of the total emissions associated with the Council's operations, and the majority directly relate to the Council's expenditure on energy and fuel. The figures include most of the Council's scope 1 and 2 emissions, but only a very small proportion of the scope 3 emissions associated with products and services purchased.

The majority of scope 1 and 2 emissions are accurately recorded and collected via existing processes. As collection and management of this information improves over time it is expected that it will become feasible to update the footprint more regularly.

The lack of comprehensive data for scope 3 emissions is due to the fact that up until recently no contracts or procurement processes have required the collection of carbon data as standard and therefore no reliable information is available.

Figure 3 below forecasts progress towards net zero for the emissions in figure 2.

It shows the annual budget cap necessary to achieve net zero for these emissions by 2030 with a linear year on year reduction, and the forecast outturn given projects in place.



*Figure 3 Net Zero Forecast Budget Pathway*

The 2030 forecast in Figure 3 is 17,136tCO<sub>2e</sub>, illustrating the scale of further actions to be developed to meet the target for this initially reported scope. The current forecast reductions are due to planned projects such as:

- a) property upgrades approved by Cabinet in November 2021
- b) street lighting upgrades
- c) shift of fleet cars and small vans to electric by 2025.

In 2022 the Council moved to a 100% renewable energy supplier in line with the PDP recommendation. The supply of renewable electricity is supported by Renewable Energy Guarantees of Origin (REGO), these are administered by OFGEM and 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.

### **Further actions to meet the Net Zero target**

The delivery of actions to achieve the target is one of the Council's priority transformation programmes and overseen by a project board made up of senior officers from across the council.

These actions broadly take the form of low-carbon solutions (e.g., within heating, lighting, transport), reducing demand (e.g., through reduced energy consumption, reduced mileage, service re-design and delivery), generating renewable energy, and as a last resort (given their long-term effectiveness is often contested) creating emission sinks via biodiversity enhancement, changes to land management or tree planting to offset by drawing emissions out of the atmosphere (these will be targeted to be as local as possible).

### **Supply Chain Emissions**

The challenge of quantifying scope 3 emissions in our supply chain has already been identified as a significant issue. It must be remembered that for the Council to achieve net zero carbon for scope 3 emissions it requires our supply chain to adopt a similar commitment to deliver net zero for the goods and services they supply. Therefore, several approaches are needed to support the change required. These include:

- a) Climate Change Commercial Ask (CCCA)
- b) Carbon Charter accreditation.

The Climate Change Commercial Ask is an innovative framework to support suppliers and Council staff involved in procurement and commissioning services to ensure environmental considerations are given due weight throughout the process. It is a first step in preparing our commercial partners to be able to provide the information we will require to effectively measure and manage scope 3 emissions.

There is a risk that small and medium sized businesses (SMEs) may be less able to meet the additional requirements of demonstrating compliance with the council's net zero ambition. The Carbon Charter is a council provided platform of support and guidance available to all Suffolk businesses to help them monitor their emissions and transition towards net zero. The Carbon Charter accreditation scheme provides formal recognition of a company's environmental achievements and gives them the

right to use the Carbon Charter logo on their marketing materials. It gives access to a network of like-minded businesses and evidence of environmental actions when bidding for work (with the Council or other organisations).

To date 470 businesses have gained Carbon Charter accreditation, and the network continues to grow. Supporting businesses to reduce energy use at this time is also critical to reducing the negative impacts of current high energy costs.

### **Transport emissions**

One further contribution to council emissions is business travel. This comprises of scope 2 emissions due to journeys in works' vehicles and pool cars and scope 3 emissions due to business travel in private cars ('grey fleet mileage') and travel to work commuting mileage.

## Emissions Breakdown (tonnes CO<sub>2</sub>e)

Scope	Category	2019/20	2020/21	2021/22
1	Buildings - Gas (1)	5,263	5,643	5,493
1	Buildings - Other Fuels	793	1,141	966
1	Refrigerants (2)	434	444	434
1	Council Owned Vehicles - Diesel	865	588	614
1	Council Owned Vehicles - Petrol	116	30	66
<b>SCOPE 1 TOTAL</b>		<b>7,471</b>	<b>7,846</b>	<b>7,573</b>
2	Buildings – Electricity (3)	4,410	3,400	3,142
2	Street & Traffic lights	3,884	3,470	2,881
<b>SCOPE 2 TOTAL</b>		<b>8,294</b>	<b>6,870</b>	<b>6,023</b>
3	Staff business travel in own vehicles	1,048	271	981
3	Staff Commuting (4)	3,841	0	2,305
3	Water use – main offices	53	44	57
3	Waste – main offices	5	5	5
3	Home to School transport (5)	4,048	4,048	4,048
3	Electricity Transmission & Distribution	772	649	551
<b>SCOPE 3 TOTAL</b>		<b>9,767</b>	<b>5,017</b>	<b>7,947</b>
<b>Total (6)</b>		<b>25,533</b>	<b>19,732</b>	<b>21,543</b>

### Notes

1. A key reason for the increase is higher ventilation during Covid resulting in increased heating demand. This is now under improved control due to installation of intelligent monitoring and controls (as part of buildings net-zero investment).
2. The 19/20 figure is estimated (actual data not available).
3. The fall is largely due to lower occupancy of buildings during Covid period; remains lower due to continued low occupancy and improved intelligent monitoring & controls (see Note 2. above).
4. Baseline year estimate derived from travel to work survey. The 21/22 figure is an assumption given introduction of new homeworking policy; this assumed reduction will have been offset to some extent by increased energy consumption in staff homes.
5. An estimate of fuel used; extrapolated from a more detailed estimate of one area of the county.
6. Totals:
  - a) **N.B.** The scope of these emissions relates to around 2% of the Council's expenditure (revenue and capital) and is probably around 10% of the total. Most of the fossil fuel and electricity purchased (scope 1 and 2 emissions) is included but only a very small proportion of the 'scope 3' emissions associated with products and services purchased.
  - b) The 20/21 reduction from the 19/20 baseline year was essentially due to the impact of COVID on operations.

- c) Main factors leading to the 15% drop in 21/22 from the 19/20 baseline are:
  - i. the shift to more homeworking (6% from less commuting; 2.5% from less energy use in buildings; 1.5% from less business travel)
  - ii. more efficient streetlighting (3.25%)
  - iii. reduction in UK grid electricity's emissions (1.5%).