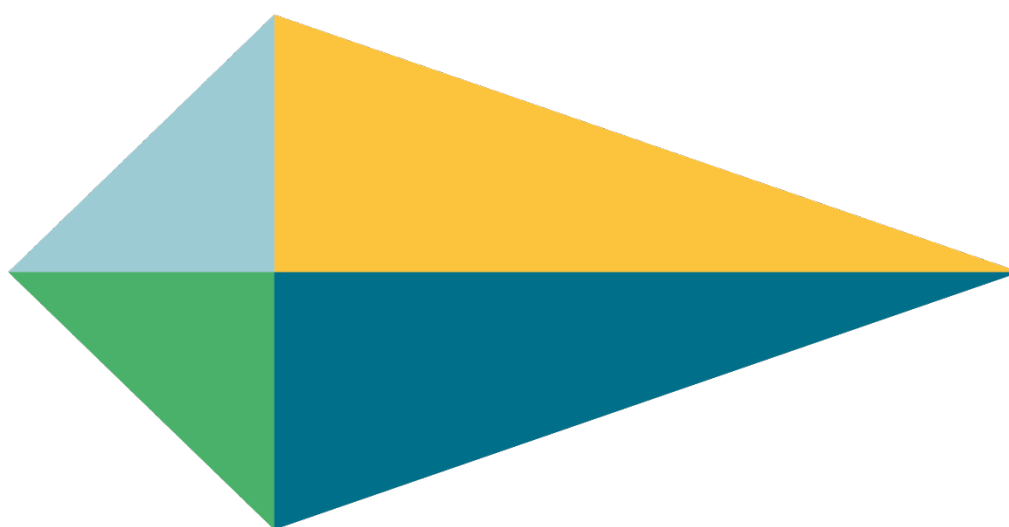


# East Suffolk Council Annual Greenhouse Gas Report 2020/21

---



## EASTSUFFOLK C O U N C I L

### Table of Contents

<b>Introduction and strategic context.....</b>	<b>2</b>
<b>Methodology .....</b>	<b>2</b>
<b>Total Emissions and Analysis.....</b>	<b>3</b>
<b>Summary of Emissions by Scope.....</b>	<b>5</b>
<b>Summary of Emissions by Activity.....</b>	<b>6</b>
<b>Appendix 1 – Caveats and Baselines .....</b>	<b>7</b>

Author of 2020/21 AGHG Report: Daniel Wareing, Environmental Sustainability Officer

## Introduction and strategic context

The annual greenhouse gas report is an annual account of the emissions arising from the estates and operations of East Suffolk Council (ESC). In 2020/21 total emissions, at 5105tCO<sub>2</sub>e, were **down by 1190 tonnes of CO<sub>2</sub>e, a 18.9% reduction, from 2019/20**. This is the same as taking 259 cars off the road<sup>1</sup>.

The total emissions for 2020/21 is the lowest recorded since the two councils began to jointly measure their emissions in 2009/10 and is the first time its annual emissions have been lower than in that year.

This report supports the council's commitment to "Care for the environment" and "Put the environment at the heart of everything we do" as part of the East Suffolk Council Strategic Plan 2020-24.<sup>2</sup>

It supports Point 7.4 of the East Suffolk Environmental Policy "Continue the Council's efforts to reduce greenhouse gas emissions."<sup>3</sup> It enables the council to understand and monitor the emissions arising through its own assets and operations over time and to continually target actions to further reduce its emissions in accordance with its ambition stated under its Declaration of the Climate Emergency made on 24 July 2019 to make East Suffolk Council carbon neutral by 2030.<sup>4</sup>

## Methodology

The scope of this report is to account for the emissions arising as a consequence of the actions of ESC.

These emissions are recorded and categorised according to scope, which DEFRA defines as follows:

**Scope 1 (Direct energy emissions):** Emissions from activities owned or controlled by our organisation that release emissions into the atmosphere. They are direct emissions and in relation to ESC these include fuel (petrol and diesel) consumed by the council's fleet, and natural gas consumed by the council's built assets.

**Scope 2 (Energy indirect emissions):** Emissions released into the atmosphere associated with our consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of the council's activities but which occur at sources we do not own or control and in relation to ESC this covers electricity purchased from the grid to power our built assets.

**Scope 3 (Other indirect emissions):** Emissions that are a consequence of our actions, which occur at sources which we do not own or control and which are not classified as scope 2 emissions. In relation to ESC these include losses (through transmission and distribution) of electricity consumed by the council's built assets; mileage incurred by staff and members using their own vehicles; and the supply and treatment of water consumed by the council's built assets.

This report accounts for emissions in terms of tonnes of Carbon Dioxide Equivalent (CO<sub>2</sub>e), calculated using the 2020 conversion factors<sup>5</sup>. CO<sub>2</sub>e is a universal unit of measurement to indicate the combined

---

<sup>1</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

<sup>2</sup> [Strategic Plan 2020 - 2024 - Report - Page 9 \(paperturn-view.com\)](#)

<sup>3</sup> [East-Suffolk-Environmental-Policy.pdf \(eastsoffolk.gov.uk\)](#)

<sup>4</sup> [Our climate commitment » East Suffolk Council](#)

<sup>5</sup> [Greenhouse gas reporting: conversion factors 2020 - GOV.UK \(www.gov.uk\)](#)

global warming potential (GWP) of all relevant Greenhouse Gases emitted, expressed in terms of the GWP of one unit of CO<sub>2</sub>.

### Total emissions and analysis

Table 1 and Figure 1 show the council's total emissions for each of the last five years, broken down by scope. For the years 2016/17 to 2018/19, the data for the former districts of Suffolk Coastal and Waveney are combined.

Over this period, the council's emissions overall have reduced by 37%. Over the same period, our emissions from electricity (Scope 2&3) reduced by 56%; from gas (Scope 1) reduced by 38%; from fleet (Scope 1) reduced by 11%; and from business mileage (Scope 3) reduced by 72%. Our emissions from water supply and treatment (Scope 3) appear to have increased because the capture of data related to this aspect improved significantly over this period of time.

**Table 1. Annual total emissions arising from activities of the council 2016/17 to 2020/21 (Tonnes of CO<sub>2</sub>e)**

Years	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Scope 1 (Fleet)</b>	2535	2495	2456	2393	2240
<b>Scope 1 (Natural Gas)</b>	2143	1872	1689	1616	1327
<b>Scope 2 (Electricity)</b>	2921	2697	1939	1817	1284
<b>Scope 3 (Transmission &amp; Distribution of Electricity)</b>	264	252	166	154	110
<b>Scope 3 (Business Mileage)</b>	258	237	277	237	73
<b>Scope 3 (Supply &amp; Treatment of Water)</b>	30	25	20	77	72
<b>Total</b>	<b>8150</b>	<b>7577</b>	<b>6546</b>	<b>6295</b>	<b>5105</b>

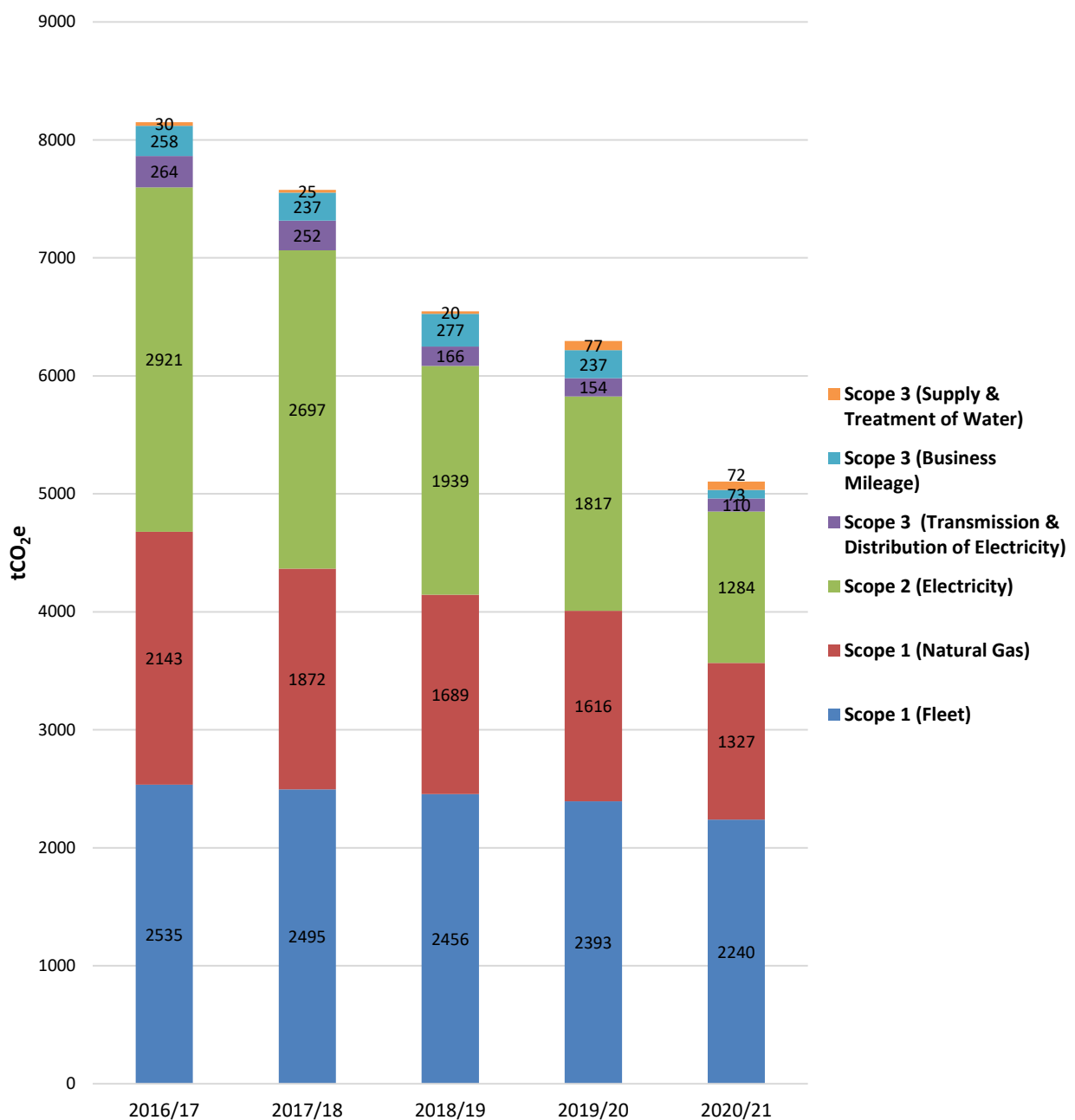
The reduction in emissions can be attributed to the following major factors:

- The continued decarbonisation of electricity through the UK National Grid which has been progressively producing more electricity from renewables and also from gas-fired power stations, which have lower emissions than the coal fired power stations they replace.
- An ongoing programme of refurbishment of the council's leisure centres to reduce their reliance on energy from the grid. This has included the retrofit of energy efficiency and improvement measures such as LED lighting, new heating and ventilation, new air conditioning, and (at Leiston) a new heat exchanger in the swimming pool. Also, the installation of energy generating systems on site including a new Combined Heat and Power Unit at Waveney Valley, a new 24.75kWp solar PV array at Deben Pool and a new 8.32kWp solar PV array at Leiston.
- As well as improving the energy performance of facilities following completion of works, the refurbishments of the sites required their full or partial closure. The five main leisure centres are major consumers of energy, so any closure will lead to a significant decrease in the council's emissions.
- It should be anticipated that as 58.2% of the reduction in the council's emissions in 2020/21 was due to the closure for 9 months of all 6 leisure centres (in compliance with Government instructions to control the spread of Covid-19), energy consumption and therefore emissions

will return to around pre-pandemic levels following the resumption of normal operations as social distancing restrictions ease.

- In 2020/21, a steep reduction in emissions resulting from business mileage was observed, falling 69.4% from the previous year. Social distancing requirements due to the Covid-19 pandemic resulted in the widespread adoption of remote meeting technologies to replace business meetings that would typically have taken place in person pre-Covid. Whilst it can be expected that business mileage will increase in 2021/22 in part as social distancing restrictions ease it is anticipated that the use of remote meeting technology will be embedded to reduce significantly those business meetings that can be conducted in this way.

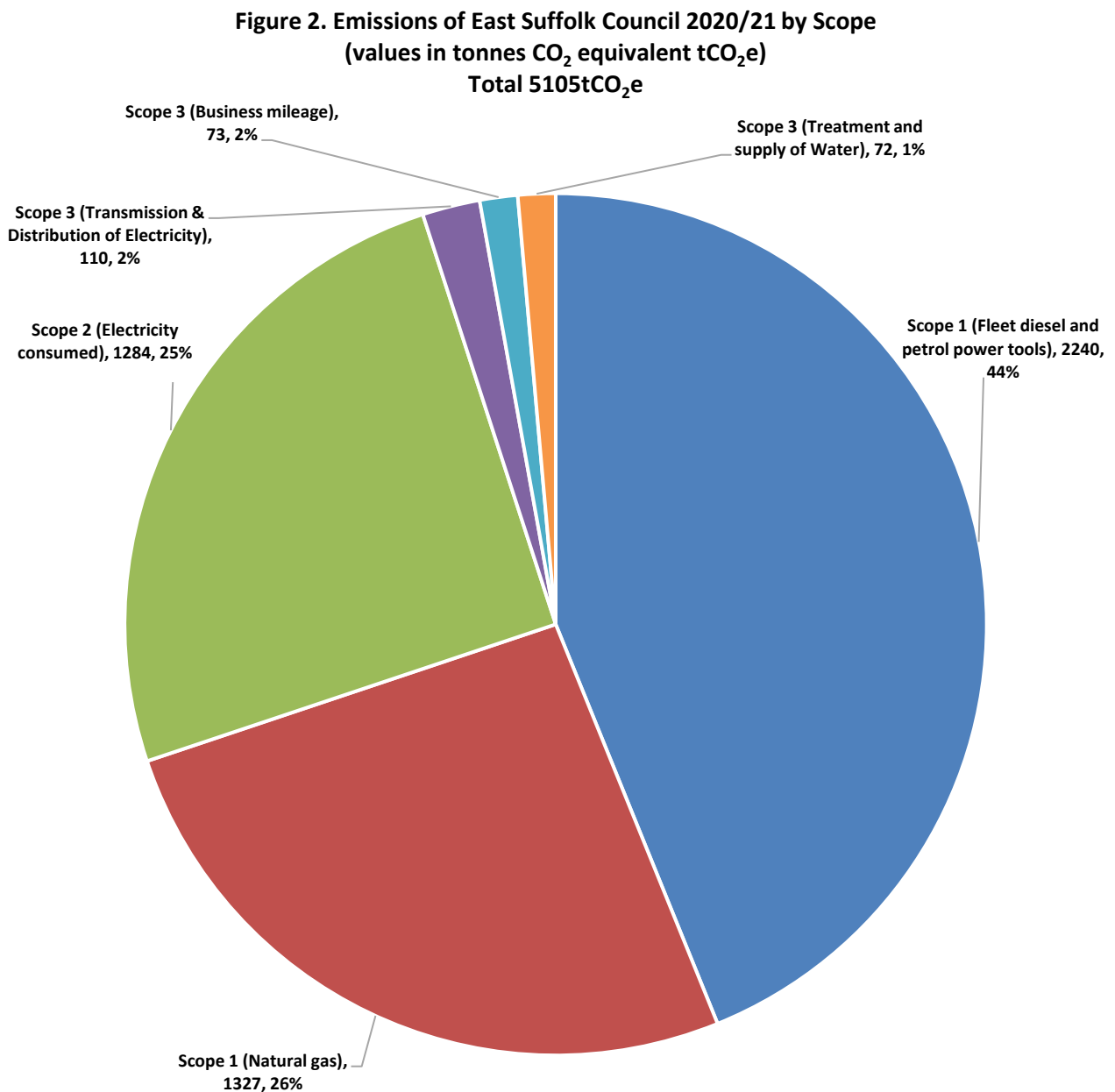
**Figure 1.**  
**Annual total emissions arising from activities of the Council 2016/17 to 2020/21**  
**(Tonnes of CO<sub>2</sub>e)**



## Summary of 2020/21 Emissions by Scope

Figure 2 shows the value, and proportion as a percentage of the grand total, of the council's emissions attributable to each scope in 2020/21.

Direct Scope 1 emissions from the consumption of natural gas and fuels accounted for 70% of the council's emissions, while emissions resulting from Scope 2 electricity consumption accounted for a further 25%. The remaining indirect Scope 3 emissions (losses from transmission and distribution of electricity; business mileage; and supply and treatment of water) together accounted for the remaining 5% of emissions.

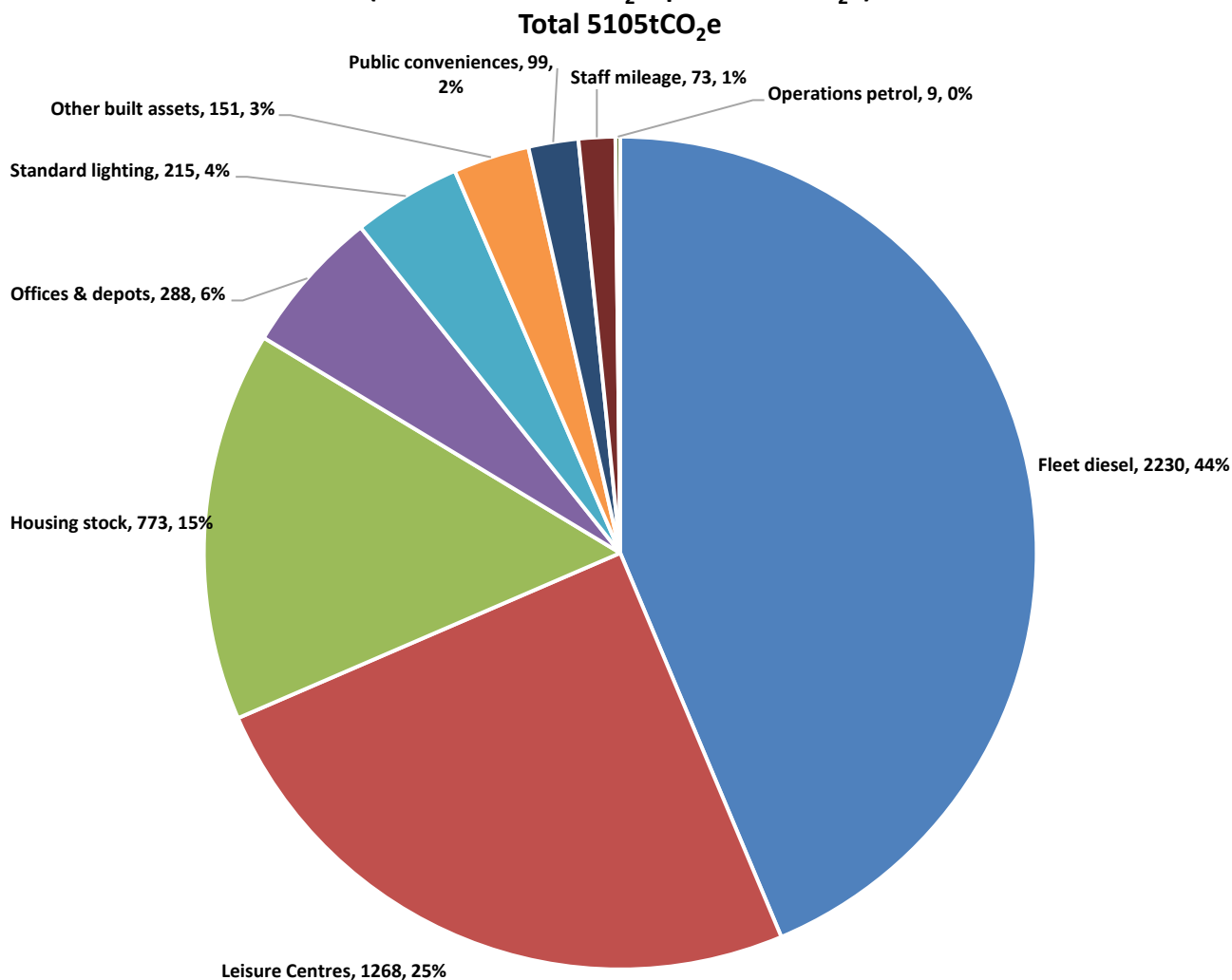


## Summary of 2020/21 Emissions by Source Activity

Figure 3 shows the value, and proportion as a percentage of the grand total, of the council’s emissions attributable to each type of source activity in 2020/21.

For each category of built assets, this includes the emissions arising from the use of Scope 1 (Gas), Scope 2 (Electricity), Scope 3 (Electricity T&D), and Scope 3 (Supply & Treatment of Water) (where applicable – for example, standard lighting uses no gas or water).

**Figure 3. CO<sub>2</sub>e emissions by source activity of East Suffolk Council 2020/21**  
 (values in tonnes CO<sub>2</sub> equivalent: tCO<sub>2</sub>e)



The fleet is the largest single type of source of the council’s emissions, with the six main leisure centres in second place. In 2020/21 the six leisure centres accounted for 45% of emissions from our built assets, with the other notable categories of assets being our housing assets (28%), offices and depots (10%), and standard lighting (8%), and public conveniences (4%). The category “other built assets” includes all those that do not fit into the other categories of built assets already mentioned

and includes assets such as car parks, tool sheds, feeder pillars, cemeteries, kiosks, fountains and others.

## **Appendix 1. Caveats and Baselines**

### **Caveats**

It should be noted that efforts to improve data capture and reporting are ongoing, and as additional sources of emissions are identified over time the overall scope of the report has expanded and may expand further in the future. Furthermore, factors such as the acquisition and disposal of assets, temporary closures of assets, improvements of assets, and changes to the usage of assets, add to the complexity of the overall picture. Any comparison made between the carbon footprint of the council from year to year should take these factors into account.

East Suffolk Council was formed from the merger of Suffolk Coastal District Council and Waveney District Council in April 2019. All known data collected by those councils in previous years has been combined wherever figures and charts show data for previous years.

### **Baselines**

With time, the council's ability to track its carbon footprint has improved through identifying and adding more sources of data to all scopes over the years, and therefore the baseline year for each Scope, and in some cases each source within eachscope, will vary as follows:

#### **Scope 1 (Fleet Diesel)**

- Scope 1 (Fleet Diesel) has included full data from the then Waveney District Council fleet since 2013/14; prior to that only the refuse collection fleet had been included.

**The baseline year for Scope 1 (Fleet Diesel) is therefore 2013/14.**

#### **Scope 1 (Operations Petrol)**

- Scope 1 (Operations Petrol) has included data on the consumption of petrol by the Council's operational services since 2019/20.

**The baseline year for Scope 1 (Operations Petrol) is therefore 2019/20.**

#### **Scope 1 (Natural Gas)**

- Scope 1 (Natural Gas) complete consumption data from the council's housing stock has been included in the annual report since 2013/14; limited data relating to gas consumption from the housing stock had been included from 2011/12.
- Scope 1 (Natural Gas) consumption data from sources formerly operated by Sentinel Leisure Trust on behalf of the Council since 2016/17.

**The baseline year for Scope 1 (Natural Gas) is therefore 2016/17.**

#### **Scope 2 (Electricity)**

- Scope 2 (Electricity) consumption data from the council's housing stock has been included in the annual report since 2013/14.
- Scope 2 (Electricity) consumption data from sources operated by Sentinel Leisure Trust on behalf of the Council since 2016/17.

- Scope 2 – (Electricity) consumption data now includes, from the 2019/20 report onwards, consumption data from Standard Lighting (street lamps) owned by ESC, backdated to 2017/18.

**The baseline year for Scope 2 (Electricity) is therefore 2017/18.**

### **Scope 3 (Business Mileage)**

- Scope 3 (Business mileage) data included complete business mileage claim data from directly employed staff plus Norse staff on council business from 2013/14 onwards.
- Scope 3 (Business mileage) has since 2018/19 included data on mileage claimed by elected members.

**The baseline year for Scope 3 (Business Mileage) is therefore 2013/14.**

### **Scope 3 (Electricity Transmission & Distribution)**

- Scope 3 (Electricity Transmission & Distribution) includes sources as they are added to Scope 2 capture.

**The baseline year for Scope 3 (Electricity Transmission & Distribution) therefore mirrors that for Scope 2 (Electricity) that is 2017/18.**

### **Scope 3 (Supply and Treatment of Water)**

- Scope 3 (Supply and Treatment of water) is included in the 2020/21 report for the first time. The data includes data just for the four leisure centres in the south of the district dating back to 2007/08, and data for most other sites where water is consumed dating back to 2019/20, and data for the two leisure centres in the north of the district from 2020/21 onwards.

**The baseline year for Scope 3 (Supply and Treatment of Water) is therefore 2020/21.**

All baselines are subject to change in the event of significant additional data capture coming to light in future reports.