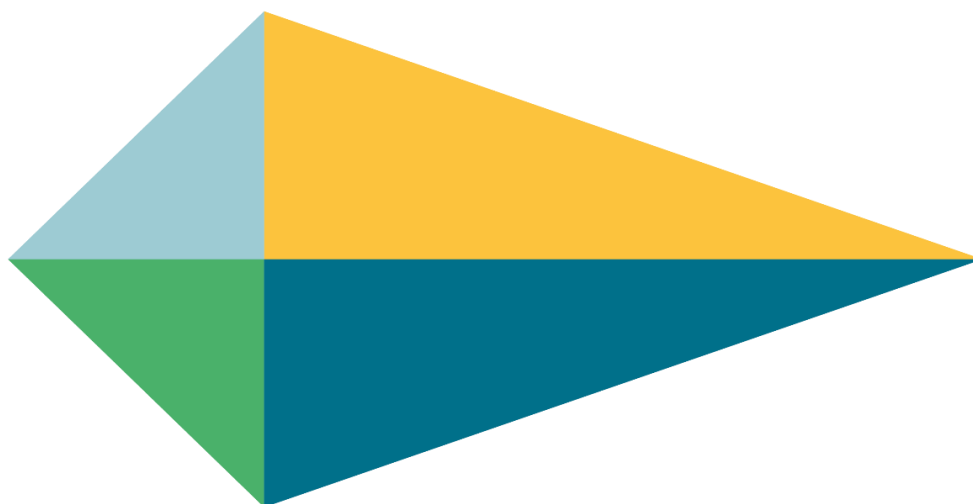


East Suffolk Council Annual Greenhouse Gas Report 2021/22



EASTSUFFOLK C O U N C I L

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1. 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 2021/22 total quantified emissions, at 5267tCO₂e, were **up by 162 tonnes of CO₂e, or an increase of 3.2%, from the previous year**. It is the first increase in annual emissions observed since 2016/17, when the scope of the report expanded significantly with the inclusion from that year onwards of data from assets managed by Sentinel in the north of the district.

A modest increase over the total for the previous year was anticipated, due to distorting effect of restrictions mandated to check the spread of Covid which meant that our leisure centres were all closed for much of that year, and reopened from April 2021.

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 2020-24.¹

It supports Point 7.4 of the East Suffolk Environmental Policy "Continue the Council's efforts to reduce greenhouse gas emissions"². 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 2030³.

2. 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 your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of the organisation'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 is based on the Government's "Environmental Reporting Guidelines"⁴ and accounts for emissions in terms of tonnes of Carbon Dioxide Equivalent (CO₂e), calculated using the 2021

¹ [Strategic Plan 2020 - 2024 - Report - Page 9 \(paperturn-view.com\)](#)

² [East-Suffolk-Environmental-Policy.pdf \(eastsoffolk.gov.uk\)](#)

³ [Our climate commitment » East Suffolk Council](#)

⁴ [Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements - GOV.UK \(www.gov.uk\)](#)

conversion factors⁵. CO₂e is a universal unit of measurement to indicate the combined global warming potential (GWP) of all relevant Greenhouse Gases actually emitted, expressed in terms of the GWP of one unit of CO₂.

3. Total emissions and analysis

Table 1 and Figure 1 show the council’s total quantified emissions for each of the last six 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 quantified emissions overall have reduced by 35%. Over the same period, our emissions from electricity (Scope 2&3) reduced by 56.6%; from gas (Scope 1) reduced by 28.2%; from fleet (Scope 1) reduced by 11.8%; and from business mileage (Scope 3) reduced by 57.8%. 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 2021/22 (Tonnes of CO₂e)

Years	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Scope 1 (Fleet)	2535	2495	2456	2393	2240	2235
Scope 1 (Natural Gas)	2143	1872	1689	1616	1327	1539
Scope 2 (Electricity)	2921	2697	1939	1817	1284	1269
Scope 3 (Transmission & Distribution of Electricity)	264	252	166	154	110	112
Scope 3 (Business Mileage)	258	237	277	237	73	99
Scope 3 (Supply & Treatment of Water)	30	25	20	77	72	13
Total	8150	7577	6546	6295	5105	5267

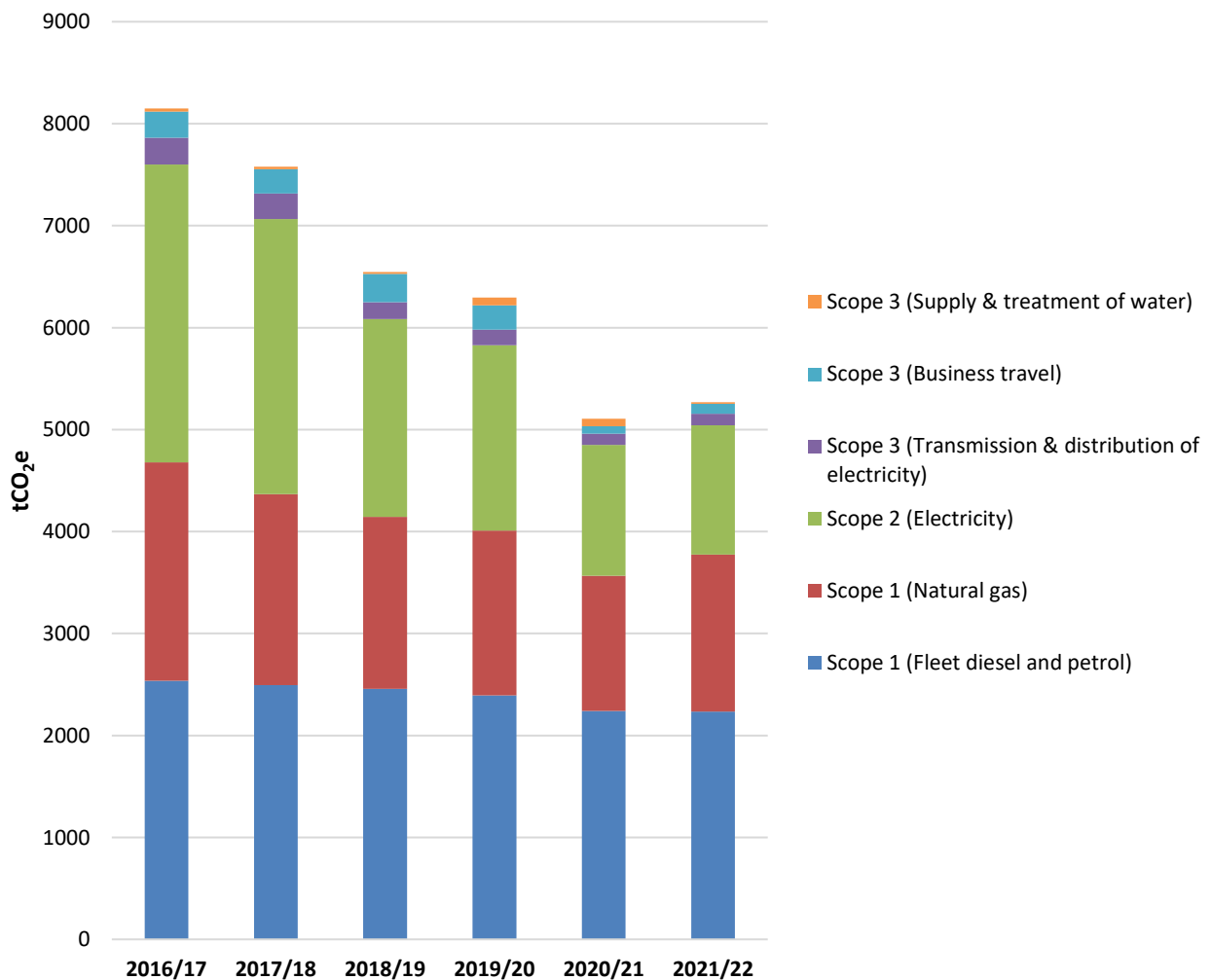
The reduction in emissions can be attributed to the following major factors:

- 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 have been replacing.
- 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; and the installation of energy generating systems on site to help reduce dependency on grid electricity, 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 completions 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.

⁵ [Greenhouse gas reporting: conversion factors 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/90222/greenhouse_gas_reporting_conversion_factors_2021.pdf)

- It should be noted that 58.2% of the reduction in the Council’s emissions in 2020/21 compared to 2019/20 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). It was therefore anticipated that energy consumption and therefore emissions arising from our leisure centres would bounce back in 2021/22 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 business mileage emissions rose in 2021/22 in response to the removal of Covid restrictions, emissions from business mileage were 57.8% down on the 2019/20 level, reflecting the wide embedment of the use of remote meeting technology to avoid the need for travel to business meetings that are able to be conducted remotely.

**Figure 1. Annual total emissions in current scope of Annual Greenhouse Gas Report arising from activities of the Council
2016/17 to 2021/22
(Tonnes of CO₂e)**

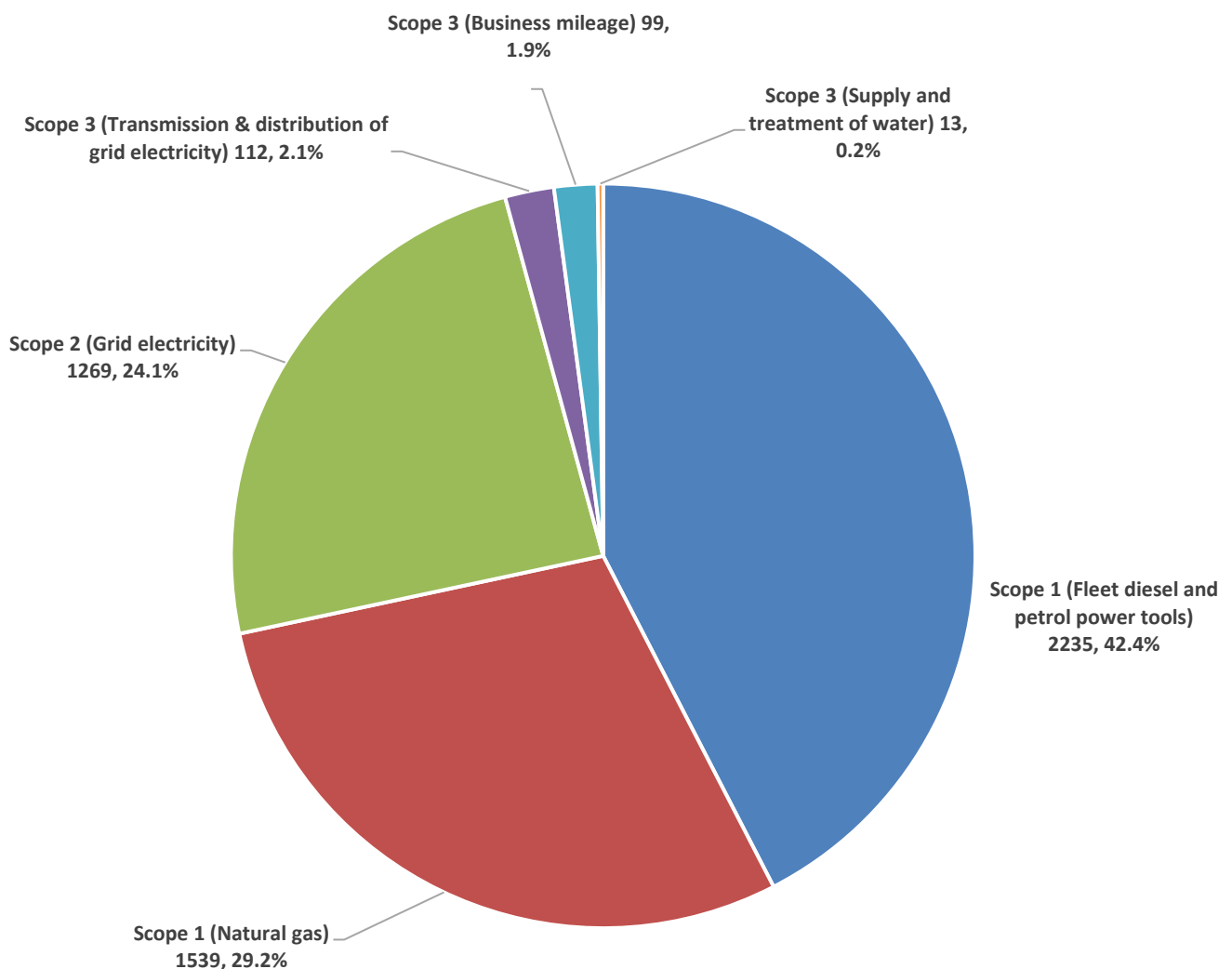


4. Summary of 2021/22 Emissions by Scope

Figure 2 shows the value, and proportion as a percentage of the grand total, of the council's emissions attributable to each Scope in 2021/22.

Direct Scope 1 emissions from the consumption of natural gas and fuels accounted for 73.1% of the Council's emissions, while emissions resulting from Scope 2 electricity consumption accounted for a further 22.8%. 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 4.2% of emissions.

Figure 2. Quantified emissions of East Suffolk Council 2021/22 by Scope
(values in tonnes CO₂ equivalent, or CO₂e)
Total 5267tCO₂e

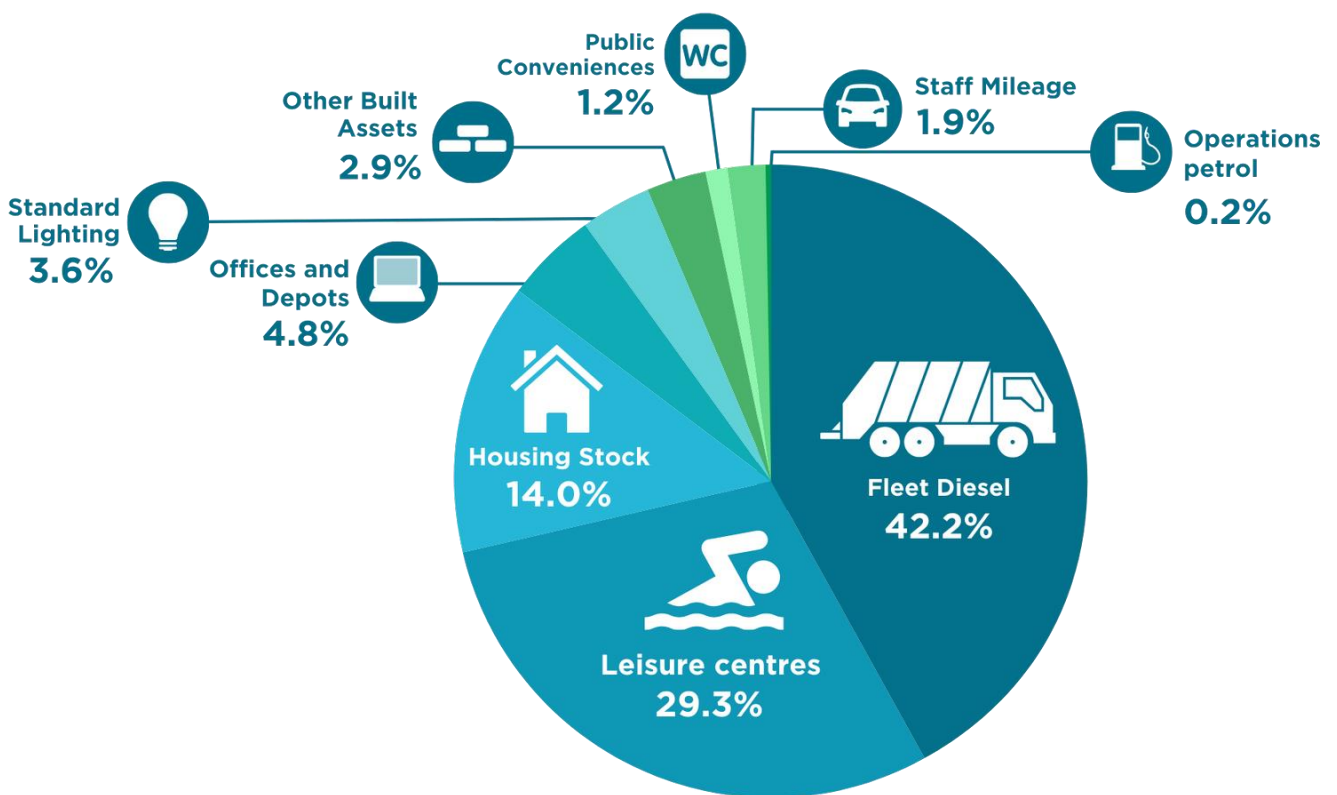


5. Summary of 2021/22 Emissions by Source Activity

Figure 3 shows the proportion as a percentage of the grand total, of the council's emissions attributable to each type of source activity in 2021/22.

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; i.e. those street lamps that are owned by ESC, uses no gas or water, whilst none of our offices or depots use gas.

Figure 3. Proportion of all quantified CO₂e emissions by type of activity 2021/22



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 the time the overall scope of the report has expanded and may expand further over time. 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 be made with awareness of these factors.

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 each Scope, 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 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.