North Norfolk District Council Carbon Footprint Report 2023/24





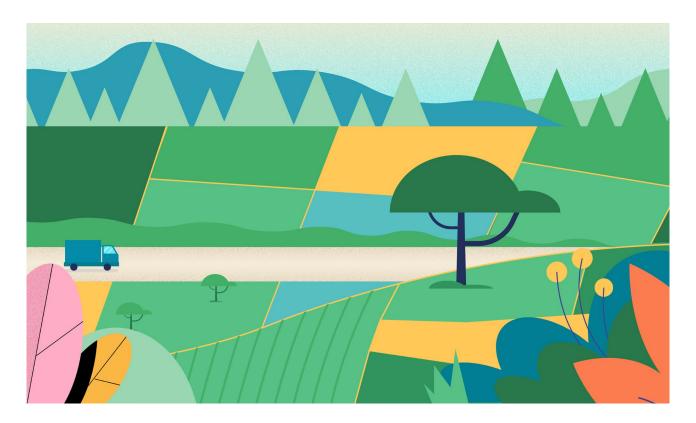
Summary

The Council's <u>Net Zero Strategy and Climate Action Plan (NZSAP)</u>, which details how we will meet our Net Zero target by 2030, requires routine measuring of our carbon emissions and the reporting of the progress we have made.

The Council's overall footprint for the period 2023/24 is $4,765~\text{tCO}_2\text{e}$. This is an increase of 36% on the previous year's figure although an overall decrease of 28% on the baseline data from 2018/19.

The main reason for the increase from last year is due to improved calculation and reporting methods. Refinements in the methodology for calculating the carbon emissions have led to improved accuracy resulting in higher calculations for certain services. The Council has also increased its property portfolio by purchasing additional houses to provide more temporary accommodation.

Over the 24/25 period, investments in energy saving/Net Zero technology will realise CO_2 e savings in some of the Council's operations. Whilst this demonstrates good progress, there are still significant steps required to maintain and continue the overall trend in reducing emissions. Further investigation is needed into many emissions sources, in order to develop viable options for emissions reductions. Emissions will continue to be monitored with increasing accuracy, and options for targeting investment into further emissions reductions will be evaluated and fed into the revision of the Net Zero Strategy's Action Plan.



Introduction

This report summarises our carbon emissions and completed Net Zero actions for the period April 2023 to March 2024. It follows a methodology based on the Greenhouse Gas accounting tool developed by the Local Government Association.

North Norfolk was the first district Council in Norfolk to declare a climate emergency. In response to this, it adopted a Net Zero Target across its operations for 2030, twenty years in advance of the national target set by the Government.

To achieve Net Zero by 2030 action needs to be taken now to accelerate decarbonisation across its estate and services. The proposed actions are outlined in the Council's Net Zero Strategy and Action Plan (NZSAP). The Council renewed its commitment to our Greener Future in the 2023-2027 Corporate Plan.

To monitor the progress of the Action Plan, an annual calculation is made of the Council's carbon footprint. Without measuring these carbon emissions we will not be able to target actions to reduce them. This measurement has been undertaken since 2018/19. The baseline figure was calculated on behalf of the council by the Carbon Trust. The reporting of this figure and the progress we have made are a requirement of the NZSAP.

Net Zero refers to the commitment to eliminate avoidable carbon emissions from our estate and operations. This will be challenging and will still require the residual (unavoidable) emissions to be mitigated by offsetting (principally through schemes that enhance the District's natural assets and/or benefit local communities, for example new tree cover). The carbon benefits of the Council's existing natural assets are not currently included in the overall footprint calculation.

This report covers eight emission areas that contribute to the Council's overall carbon footprint: scope 1 being direct emissions that the Council has complete control over; scope 2, being (indirect) emissions arising elsewhere as a result of the Council's energy consumption (which it can influence but not completely control); while scope 3 emissions arise from the Council's supply chain and are much harder to control.

The principal emissions sources are as follows:

- Gas and other heating fuels (Scope 1)
- Fleet emissions (Scope 1)
- Electricity (Scope 2)
- Staff travel (Scope 3)
- Leased buildings (Scope 3)
- Water (Scope 3)
- Council contracts (Scope 3)
- Council's own waste (Scope 3)

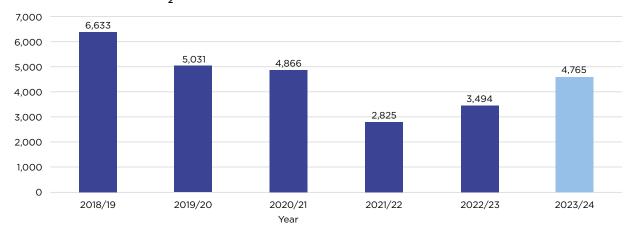
Overall emissions

23/24 Emissions: 4,765 tCO₂e





Overall emissions - tCO₂e

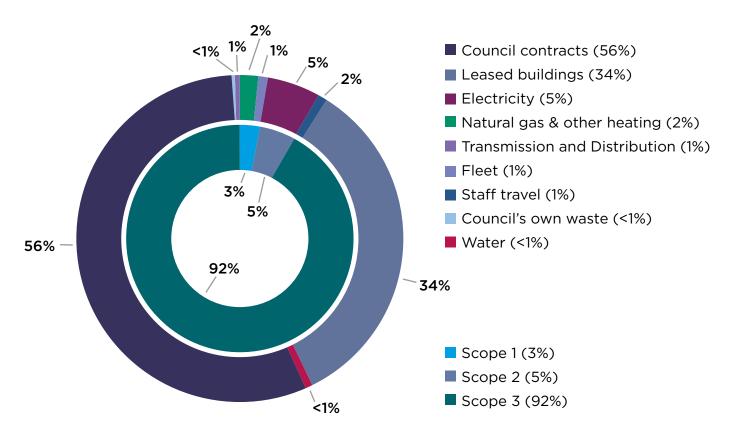


The 2023/2024 carbon footprint for North Norfolk District Council is $4,765 \ \text{tCO}_2\text{e}$. This includes our scope 1, 2 and 3 emissions. This is an increase on the previous year's footprint, but a reduction from our 2018/9 baseline.

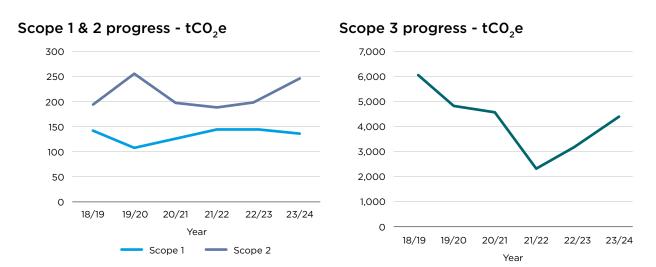
The most significant increases this year are accounted for by:

- More accurate analysis and a better understanding of our assets and related data sources including better data from our operational partners.
- The addition of new emission sources, such as the Council's recently purchased temporary accommodation stock; and increased spend within council contracts.

NNDC's emissions by area and scope, 2023/24



The Council's Scope 1 (natural gas and fleet) and Scope 2 (purchased electricity) emissions have remained reasonably steady throughout the 6 years of reporting. The Council's Scope 3 emissions have increased this year but remain below the baseline.



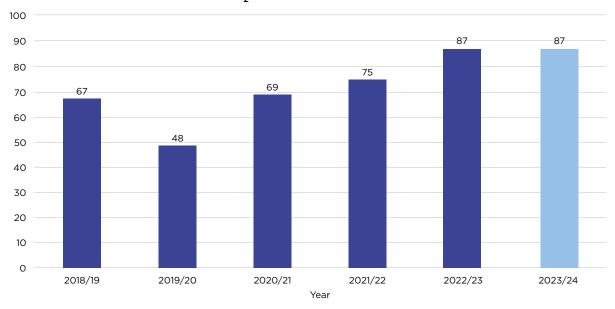
3.1. Scope 1 - Natural Gas and other heating

23/24 Emissions: 87 tCO₂e

O tCO₂e on previous year



Natural gas and other heating - tCO₂e



These emissions are produced by the natural gas and heating oil that is burned in boilers to heat our offices and buildings. The Council's offices at Cromer and Fakenham are the largest gas users. These emissions are recorded in Scope 1.

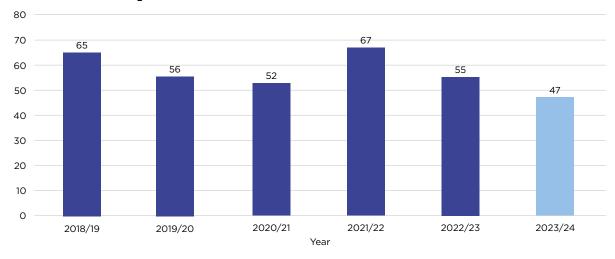
- Installed solid internal insulation in the Cromer office.
- Installed window tinting in the North Norfolk Information Office and one area of the Cromer office. This helps retain heat in the winter and keep it cool in the summer.



3.2. Scope 1 - Fleet



Fleet emissions - tCO₂e



Fleet emissions consist of those from the vehicles owned or leased by the Council to carry out its services and operations. These emissions are included in Scope 1.

- Continued to lease an electric van which the property services team uses, this is charged at the charging point at our Cromer office, using any available electricity generated by the building's roof-mounted photovoltaic panels.
- Worked with staff to reduce trips and optimize journey efficiency.



3.3. Scope 2 - Electricity







Electricity emissions - tCO₂e



This scope comprises of emissions produced through the generation of electricity (from the national grid) used by the Council. We have displayed the information of kWh of electricity used alongside the emissions because the percentage of renewable energy into the grid can vary the emissions associated with each kWh of electricity the Council has used.

The CO₂e conversion factor used to calculate the emissions figure is for the general UK energy mix as a whole (sometimes referred to as 'the dirty grid') and is irrespective of the 100% renewable tariff the Council uses to purchase electricity. Any national increase in renewable energy generation helps to decarbonise ('clean') the grid as a whole, which helps to reduce the Carbon footprint for all electricity users in an appropriate proportion. Feeding electricity from renewable sources into the grid and purchasing electricity from a 100% renewable tariff help to accelerate/incentivise this.

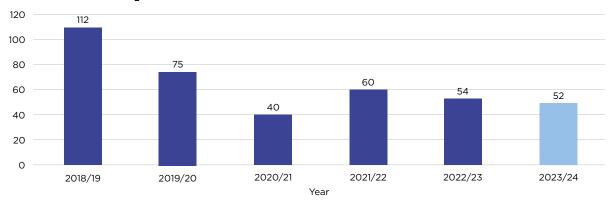
The transmission and distribution (T&D) emissions, 21.3 tCO₂e, are reported in scope 3, but all efforts to reduce scope 2 electricity contribute to reduction in T&D emissions.

- The Cromer office photovoltaic (PV) panels produced 100,015 kWh of electricity during this period, saving 20.7 tCO₂e from being released into the atmosphere.
- Supplied 145,678 kWh of green electricity to residents, visitors, staff members and partner organisations to charge their electric vehicles and travel 41,622 low emission miles.
- Continued installation of LED Lighting in council buildings and estate.
- Installed PV panels on our toilet blocks at Cadogan Road, Vicarage Street and North Walsham.

3.4. Scope 3 - Staff Travel

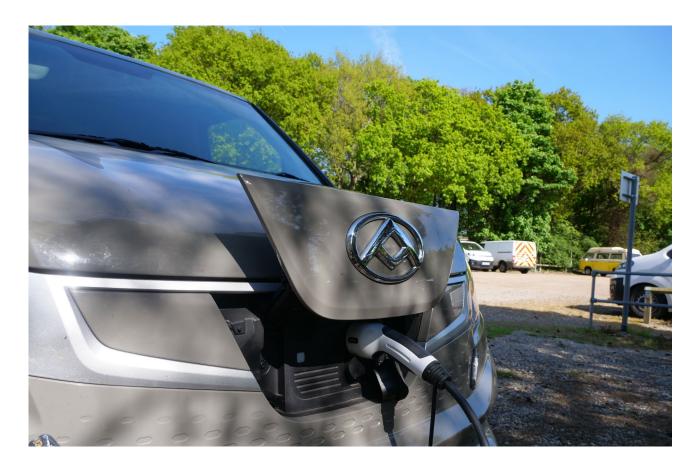


Business Travel - tCO₂e



These emissions include all those produced by staff travelling in their own vehicles on Council business.

- Continued to promote a salary sacrifice scheme to encourage staff to purchase an electric car
- Updated our Staff Travel Policy to encourage more sustainable travel and less journeys



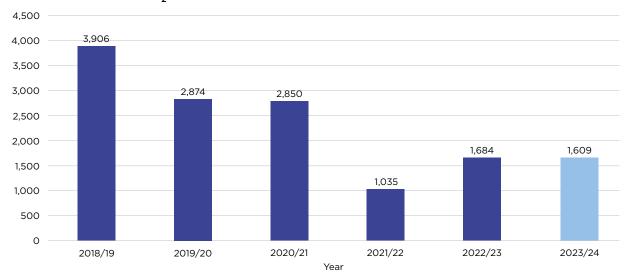
3.5 Scope 3 - Leased buildings

23/24 Emissions: 1,609 tCO₂e



2,259 tCO₂e on 18/19 baseline

Leased buildings - tCO,e



The Council owns a number of properties that are leased to third parties either to run services on behalf of the Council or as a third party landlord. This includes Cromer Pier, leisure centres, theatres and museums. The Council's carbon budget includes the scope 1 and 2 emissions of those organisations operating services or buildings on behalf of the Council.

- Installed a solar car port at the Reef. This came online at the end of July 2023 and during the remainder of the 23/24 financial year the panels made 78,399 kWh providing 35% of the Reef's electricity demands and saving 16.23 of tCO₂e.
- Invested in pool covers for our two leisure centres to reduce heat loss.
- Continued energy efficiency measures at Catfield Industrial Units.
- Obtained accurate meter readings from more tenants then previous years.
- Installed insulation bags, thermal film, 'A' grade windows and new fire doors with draft seals at Sheringham Little Theatre.
- Replaced lights with LEDs and meters with smart meters upon failure throughout the council property portfolio.
- Implemented 'Green' clauses in all new leases obliging tenants to work with the council in improving properties energy efficiency and achieving net zero where possible.

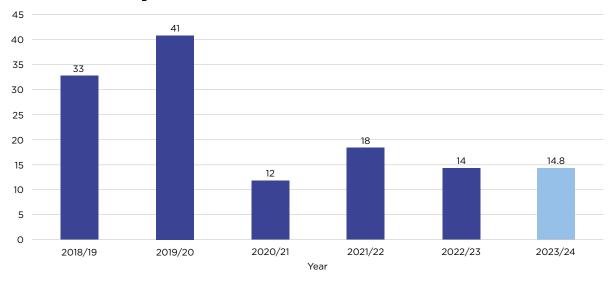
3.6. Scope 3 - Water

23/24 Emissions: 14.8 tCO₂e





Water emissions - tCO,e



This includes emissions from the processing, pumping and cleaning of water used by the Council for its services and operations (including the Council's offices and public conveniences). These emissions are included in Scope 3.

- New toilets in North Walsham, Queens Road Fakenham have significantly improved water efficiency technology.
- Installed water on demand heaters for all sinks at The Cedars.



3.7. Scope 3 - Council contracts

23/24 Emissions: 2,686 tCO₂e

1,308 tCO₂e on previous year

662 tCO₂e on 18/19 baseline

Council contract emissions - tCO₂e



The most significant Council contract as a source of emissions is the waste collection contract. Significant increase in spend was noticed in some contracts beyond the council's control, such as temporary accommodation charges for hotels and Bed and Breakfast. These emissions are included in the Council's Scope 3 emissions.

What we have done:

Worked with our contractors to improve data collection – it should be noted that this
has identified new emissions sources that were not previously included in the
footprint calculation.

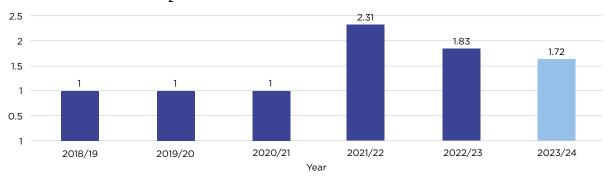


3.8. Scope 3 - Council's own waste

23/24 Emissions: 1.72 tCO₂e O.11 tCO₂e on previous year

0.72 tCO₂e on 18/19 baseline

Council's own waste - tCO,e



This includes waste generated in Council owned offices and buildings and general building waste put into skips.

- Continued to make best use of our equipment reusing and repurposing our equipment wherever possible and only sending items for recycling or landfill when no other option is possible.
- The Black swan loke renovation used over 70% upcycled, recycled or repurposed materials to ensure minimum carbon impact.
- Established a new recycling system, including food waste, into the Cromer office.



4. Wider District Emissions

Alongside the work to reduce our council emissions, we have continued to work on reducing carbon emissions and supporting and influencing others in the North Norfolk District. This is part of our wider commitment to work alongside residents, businesses, schools and community groups to influence positive change and help reduce the District's (community's) carbon footprint to Net Zero by 2045.

This year's activities have included:

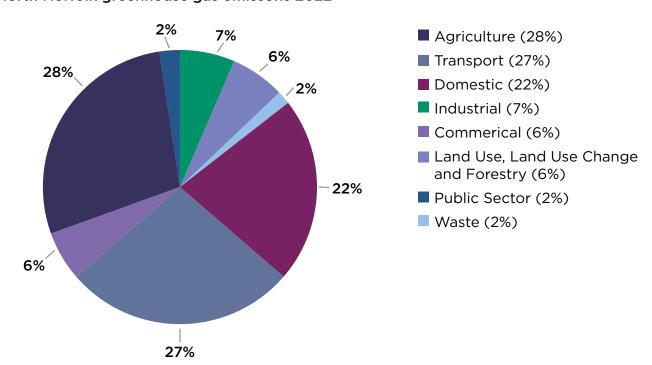
- Administering over £0.5M of energy efficiency grants through Norfolk Warm Homes to help upgrade 46 properties in the district.
- Supporting a further 36 properties to receive insulation, Solar PV and/or low-carbon heating through the Energy Company Obligation 4 LA flex scheme.
- Continuing our work with colleagues and neighbouring authorities as part of the Norfolk Climate Change Partnership, including participation in the Norfolk wide Net Zero Communities project, for which the Council is focusing on Stalham.
- Awarding more than £155,302 through the Council's sustainable communities fund to north Norfolk groups and organisations, supporting a wide range of energy saving and environmental projects.

North Norfolk District Territorial GHG emissions from 2005 - 2023

North Norfolk's regional greenhouse gas emissions have been calculated by the UK Government Department for Energy Security and Net Zero (DESNZ). These statistics provide the most reliable and consistent breakdown of greenhouse gas emissions across the country, using nationally available data sets going back to 2005. They cover territorial emissions of carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).

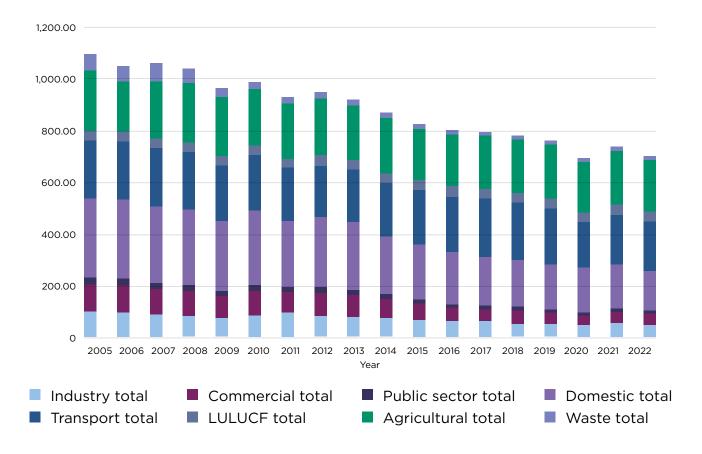
The district has seen a 36% reduction in greenhouse gas emissions between 2005 and 2022. Total emissions from the district have decreased from 1.1 million tonnes CO_2 e in 2005 to 719,000 tonnes CO_2 e in 2022. These emissions are separated into 8 main categories, with Agriculture (28%), Transport (27%) and Domestic (22%) being the largest contributors to district-wide emissions.

North Norfolk greenhouse gas emissons 2022



Industry, Commercial, Domestic and Public sector emissions have decreased significantly, and are largely to do with the electrification of the grid alongside the transition away from the dirtiest fossil fuel; coal. There is still significant work needed in these sectors to decarbonise them. Transport, agriculture, and LULUCF (Land Use, Land Use Change and Forestry) emissions have shown significantly less declines, and a few are stagnant. These trends are demonstrative of national trend.

North Norfolk emissons 2005 - 2022



Conclusions and Next Steps

The annual calculation of the Council's carbon footprint allows the monitoring of progress against the Council's journey to Net Zero.

The 2023/24 footprint shows a decrease of 28% in the Council's overall footprint from the 2018/19 baseline but an increase in emissions since the last year.

This increase in the carbon footprint demonstrates the challenges that the Council faces in meeting its Net Zero target, whilst at the same time seeking to address other challenges, such as housing need, developing communities, supporting the local economy, delivering infrastructure, and maintaining a financially sound position.

Our Corporate Plan for 2023-2027 renews the Council's commitment to Net Zero and 'our greener future' and recognises the need to embed carbon literacy at the core of the Council's decision making.

In 2024/25 the Council will produce an updated Action Plan, to reflect the changes in the Council's operations and aspirations. We will continue to conduct projects detailed in the Corporate and Net Zero Action Plans, seek external funding and find the most effective ways of delivering carbon emission reductions. The Council will also continue to monitor the methodology for calculating its carbon footprint and revise its processes to match best practice.



Inclusions and Exculsions Methodology

The Council is committed to accurately reporting its carbon footprint, collecting data using best practice and in a comparable way to other councils. We collect and calculate across a full range of the Council's emission-releasing activities classified into the three groups known as scopes. These are defined in the GHG Protocol Corporate Standard and within the Local Government Association carbon accounting tool.

The Council has been investigating expanding its Scope 3 reporting to include more categories in line with the GHG protocol guidance. Current and further categories are listed below. The availability and accuracy of these are being assessed as they may be included in future years' reporting.

Scope	What we've included	What we haven't included	Accuracy/Confidence level in available data
Scope 1	All combustible fuel the council pays for: • Gas at council offices, • Diesel in generators, • Diesel in staff fleet • Oil for some Temporary Accommodation	Fugitive Emissions from Refrigeration, cooling and aerosols. These are minimal.	High
Scope 2	All electricity purchased by the council.	We haven't reported our electricity emissions at 0 despite possessing a no nuclear green energy tariff.	High
Scope 3	 Business Travel (car) Leased Buildings Water Council Contracts (Cost based spend) Council's own waste Transmission and Distribution 	 Staff Commuting Working from Home Investment emissions Pension emissions Business Travel (public transport) Council spend not associated with a contract Concession stands and activity on council land 	Low