1. Introduction

This report is a summary of the environmental impact from the activities West Suffolk Council (WSC) undertook to manage and reduce its carbon emissions during the year ending 31 March 2024.

After the declaration of an Environment and Biodiversity Emergency in West Suffolk in September 2019, West Suffolk Council launched an Environment and Climate Change Task Force to evaluate current progress and develop new avenues to help reduce greenhouse gas emissions in line with current aspirations. The Task Force's recommendations were confirmed by Cabinet and West Suffolk Council agreed a Net Zero Emissions by 2030 target with carbon budgeting periods agreed to measure performance towards this target – see Table 1. The Environmental Management Group has taken the outcomes of the task force and developed an action plan to achieve them. The Environmental Management Group has cross council membership with progress also included in the annual report. A high level summary of the council's commitments can be found in the Environmental Policy Statement.

Table 1 shows the carbon budget periods set out in West Suffolk Council's Environment and Climate Emergency Declaration

Budget period	Period	Annual emissions at end of period	Emissions budget for the period
First	April 2020 to Mar 2023	4,675 tCO₂e per year	18,700 tCO₂e
Second	April 2023 to Mar 2026	2,484 tCO₂e per year	8,292 tCO₂e
Third	April 2026 to Mar 2030	840 tCO₂e per year	2,520 tCO₂e
Fourth	2030-31	Net zero emissions	

This statement focuses on the council's own emissions. There is also a significant amount of work which contributes to improving the environment across the district which is not covered in this statement. This work is carried out both by the council directly and in conjunction with partners. More information can be found on the council's webpage <u>tackling climate change</u>.

The methodology used to write this report is based on the Government's <u>Streamlined Energy and Carbon Reporting (SECR)</u> requirements. The council is not obliged to report under these regulations but reports on a voluntary basis. A breakdown of reporting scopes and details of any estimated data is included in Appendix 2.

Overview of environmental performance during 2023-24

Total emissions figures include West Suffolk Council and Abbeycroft Leisure.

Total emissions down 39% compared to 2010 baseline. Total emissions up 1.3% compared to 2022-23.

The below summary figures are for West Suffolk Council only.

Renewable energy generated up 183% compared to 2012 baseline. Renewable energy generated up 20% compared to 2022-23.

Gas consumption up 5% compared to 2019-20 baseline. Gas consumption down 28% compared to 2022-23.

Grid electricity consumption up 28% compared to 2019-20 baseline. Grid electricity consumption up 13% compared to 2022-23.

Total owned vehicle emissions down 12% compared to 2019-20 baseline. Total owned vehicle emissions down 3% compared to 2022-23.

Business travel down 66% compared to 2010 baseline. Business travel up 1% compared to 2022-23.

Total water consumption up 32% compared to baseline. Total water consumption up 3% compared to 2022-23.

Total West Suffolk House waste down 66% compared to 2012 baseline. The recycling rate 73%, down 5% compared to 2022-23. Total West Suffolk House waste down 17% compared to 2022-23.

6 Green Flags retained - Abbey Gardens, East Town Park, Brandon Country Park, Aspal Close & West Stow Country Park, Nowton Park.

Public electric vehicle (EV) chargers installed by WSC can support 70 EVs charging at the same time.

Energy delivered to drivers powered 421,490 miles.

136 trees and 705 whips planted during 2023-24.

Office printing down 66% compared to 2019 baseline. Office printing down 1% compared to 2022-23.

Greenhouse gas emissions arising from West Suffolk Council activities

Target: Reduce greenhouse gas emissions from West Suffolk Council activity to net zero by 2030. Measured in Carbon Dioxide equivalent (CO₂e).

West Suffolk Council and Abbeycroft Leisure	
Baseline emissions 2010	8,215 tonnes CO₂e
Annual emissions in 2023-24	4,979 tonnes CO₂e

Carbon Dioxide equivalent (tCO₂e) is a unit of measurement used to indicate the global warming potential of a greenhouse gas, expressed in terms of the global warming potential of one unit of Carbon Dioxide. It is used to evaluate the releasing (or avoiding releasing) of different greenhouse gases against a common basis.

We include emissions that arise from buildings and transportation. This includes the leisure centres operated by Abbeycroft Leisure (ACL) and other operational buildings such as the Apex; it also includes buildings that we purchase energy for but excludes buildings that we own and are leased to local businesses who pay their own energy bills. The figures do not include the staff commuting journeys to our sites.

Total emissions are up 1.3 per cent compared to 2022-23 - see Figure 1 below. There has been a 0.5 per cent decrease in emissions from council activity and a 4.6 per cent increase in emissions from Abbeycroft Leisure compared to 2022-23 - see Figure 2 on the next page. Finally, Figure 3 shows a breakdown of total emissions by source.

Figure 1 - Combined greenhouse gas emissions by year

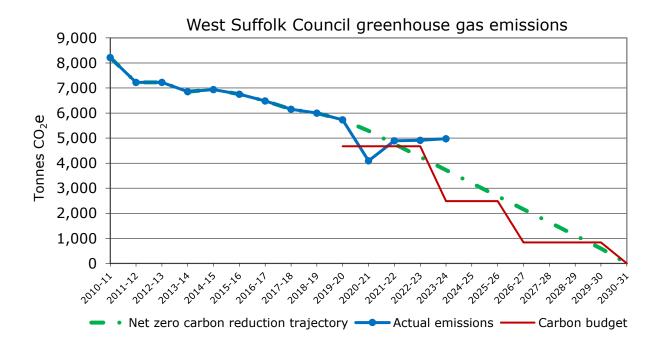


Figure 2 – Greenhouse gas emissions by organisation over time

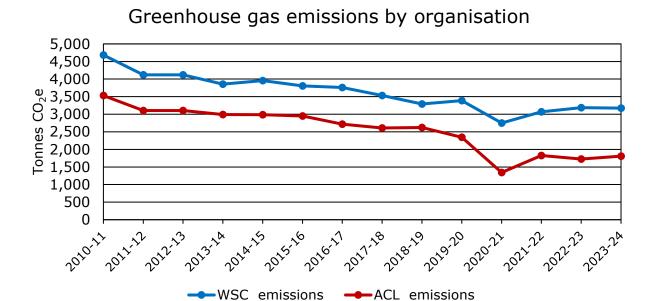
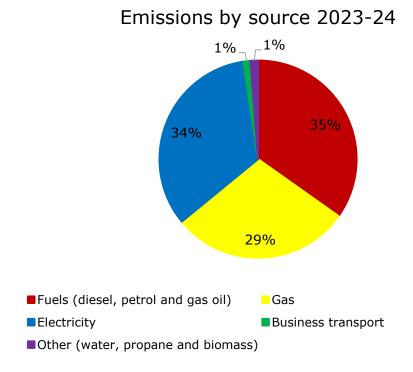


Figure 3 - Total greenhouse gas emissions by source



Notes

The long term 'decarbonisation' of grid electricity is a key component of the UK emissions reduction targets. Emissions arising from grid supplied electricity increased by 7 per cent in 2023 compared to 2022 data due to due to an increase in natural gas use in electricity generation and a decrease in renewable generation. The Appendix contains further information on reporting scopes.

2. Building energy use

Target: Meet the net zero emissions target we need to reduce energy consumption from buildings operated in 2019-20 by 50 per cent by 2025.

West Suffolk Council and Abbeycroft Leisure	
Emissions in 2010	5,436 tonnes CO₂e
Emissions in 2023-24	3,158 tonnes CO₂e

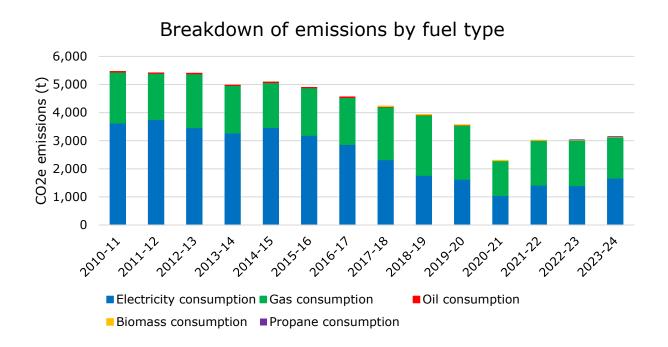
Emissions arising from all gas, electricity and biomass consumption are included in this section. Biomass is a fuel stock comprised of wood chips. Combined emissions from WSC and ACL buildings are increasing. In comparison to 2022-23, total emissions from buildings are up by 3.6 per cent, however, they are down 41.9 per cent compared to 2010. Figure 4 shows the overall decrease in emissions over time.

During 2022-23 and 2023-24, a significant investment has been made in building decarbonisation measures. Building improvements range from the 'quick wins' (for example, LED lighting upgrades and energy efficient hand driers) to more substantial investment (such as roof insulation and air source heat pumps). The buildings that have had improvements made are:

- The Apex
- The Avenue
- The Athenaeum
- Brandon country park bungalow and toilets
- Bury St Edmunds Bus Station
- East Town Park toilets
- Heldhaw Road Changing Rooms
- James Carter Road, Mildenhall
- Lake Avenue Housing
- Bury St Edmunds Leisure Centre
- Moyse's Hall

- Nowton Park Lodge Cottage and toilets
- Provincial House
- Rangers Flat, Hardwick Heath
- The Severn Road Enterprise Units
- The Elms, Brandon Housing
- Jubilee Walk toilets
- Ram Meadow toilets
- Recreation Ground toilets
- West Stow Country Park toilets
- West Suffolk House

Figure 4 – Emissions from building utility consumption over time



Electric vehicle charging

The cumulative number of EVs that can charge simultaneously using public charging infrastructure installed by WSC is 70. More installations for public car parks are planned during 2024-25. The electricity provided to support public charging infrastructure in West Suffolk accounts for 37tCO₂.

3. Renewable energy

Target: Increase the amount of renewable energy generated each year.

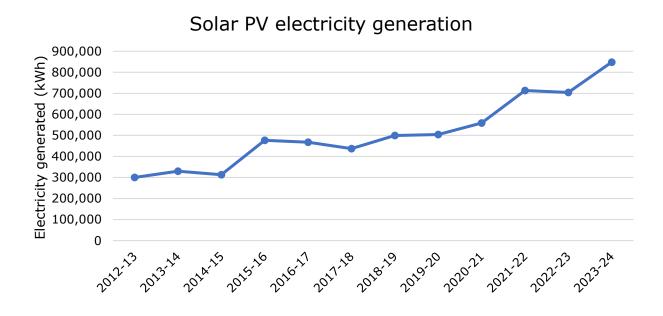
Renewable energy generated	
Baseline generation in 2012-13	300,220kWh
Generation in 2022-23	848,161kWh

The council has installed solar PV systems to reduce its electricity costs and carbon emissions. The energy generated by all systems installed on council offices, parks cafes, depots and leisure centres is totalled in this section.

The total capacity of the PV systems installed on West Suffolk Council property and leisure centres stands at 1,174 kilowatt peak (kWp) and they generated 848,161 kilowatt hours (kWh) of electricity during 2023-24, which is enough to power 239 average sized homes for the year. This figure is more than last year due to installing additional PV systems at West Suffolk Operational Hub and West Stow.

Figure 5 below shows the amount of electricity generated per year which is generally increasing over time.

Figure 5 – Annual renewable electricity generation on council properties.



We also install solar PV on third party buildings through the council's <u>Solar for Business</u> scheme. 2023-24 was a record year for installations, with 2,412 kWp installed, bringing the total to 7,668 kWp. This is not included in our carbon accounting, as electricity is consumed by third parties.

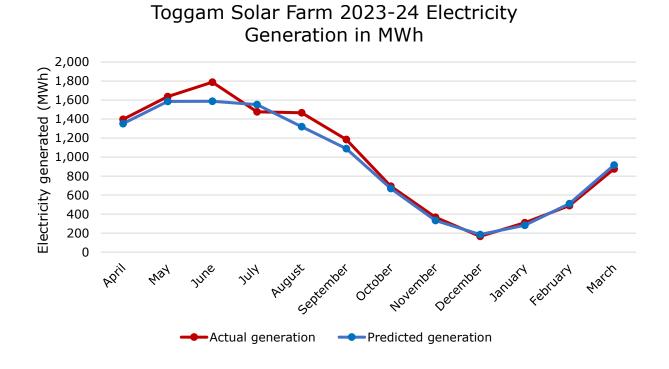
Toggam solar farm

During 2023-24 the solar farm generated 11,851 megawatt an hour (MWh) of renewable electricity which was 4 per cent above target for the year. Figure 6 shows the target electricity generation along with actual generation for Toggam Solar Farm in 2023-24.

The financial performance far exceeded the original business case due to the high value of electricity during this period. Since the purchase of the solar farm in 2016, £12.7m has been generated in energy sales, and the original investment of £14.3m will be repaid in the summer of 2024. The original business case forecast a payback of 10 years, but this will be achieved in 8 years.

The electricity that is sold into the National Grid is enough to power around 3,320 homes and offset the carbon dioxide emissions from 1,509 cars.

Figure 6 – Chart showing electricity generation during 2023-24.



4. Fuel use

Target: Reduce the emissions from total fuel consumption from the baseline year in 2010.

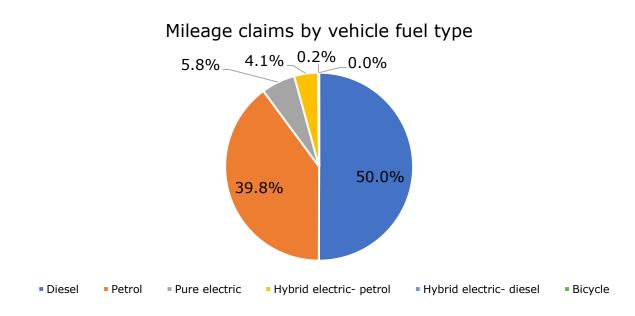
Fuel use	
Consumption in 2019-20	773,431 litres
Consumption in 2022-23	704,310 litres

This section includes the total litres of fuel used in, but not limited to, refuse collection vehicles, road sweepers, grounds maintenance vehicles, petrol or diesel bought using fuel cards and industrial mobile machinery.

Total emissions from fuel use are 12 per cent below the baseline year of 2019-20 and down by 3 per cent compared to 2022-23. There were 94tCO₂e of out-of-scope emissions from fuel use in 2023-24. See Appendix 1

Figure 13 shows the breakdown of mileage claims by vehicle fuel type.

Figure 13 - Total mileage claims by fuel type

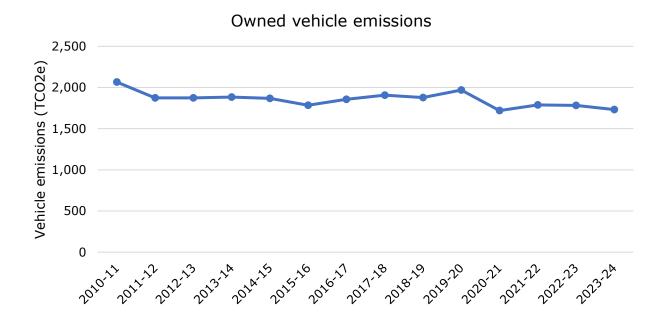


Appendix 2 for more details on out-of-scope reporting.

The council's road registered electric fleet vehicles have travelled 29,991 miles during 2023-24, producing zero point of use emissions. Driving the electric vehicles has saved $5.1tCO_2e$ compared to driving the same distance using a similarly sized diesel equivalents.

The increase in EV mileage has been driven by the addition of new EVs to the fleet including four small vans and one larger transit van, more information can be found in the press release <u>West Suffolk Council - West Suffolk EV fleet grows</u>.

Figure 7 – Chart showing owned vehicle emissions by year.



5. Business travel

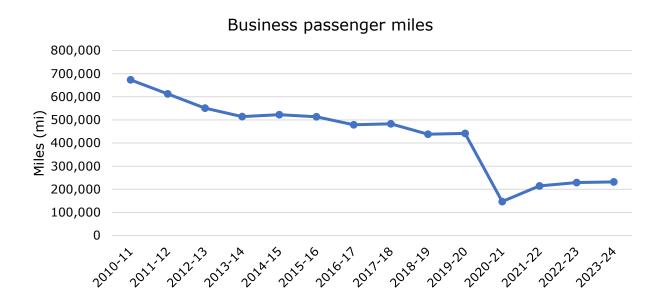
Target: Reduce the amount of grey fleet miles from the baseline year in 2010. Grey fleet includes vehicles that are owned and used by council employees.

Distance travelled	
Baseline 2010	673,285 miles
Distance travelled in 2023-24	232,037 miles

Business travel includes staff and councillor journeys, pool car use and other owned or leased vehicles. Business travel has increased 1 per cent compared to 2022-23, as shown in Figure 8 below however, the total miles travelled remains 66 per cent lower than the 2010 baseline. Business travel contributed 58.6tCO₂e to the council's total emissions. Of the total distance travelled, private car use (grey fleet) increased by 2 per cent and pool car use decreased by 89 per cent compared to 2022-23. During 2023-24, 6 per cent of total staff milage claims were for journeys taken in a pure electric vehicle and the council aims to increase this percentage over time. Appendix 1 contains a breakdown of the total claims by vehicle fuel type.

Although the council doesn't own the vehicles used for business mileage, it is responsible for the emissions created from business activity. These emissions are reported in scope three. Appendix 2 contains more details on emissions scopes. The continued use of agile working and technology such as Microsoft Teams has helped to keep staff mileage lower than pre pandemic levels. The council will continue to use these arrangements, helping to minimise emissions from business travel.

Figure 8 - Chart showing business passenger miles travelled.



Public transport

Staff used public transport to cover 9,246 miles during 2023-24 which was 50 per cent lower than last year. This decrease is due to the end of a European funded project that required international travel. Use of public transport produced 558 kgCO₂e during 2023-24.

6. Water consumption

Target: Reduce the amount of water used in council activities from the baseline year in 2010.

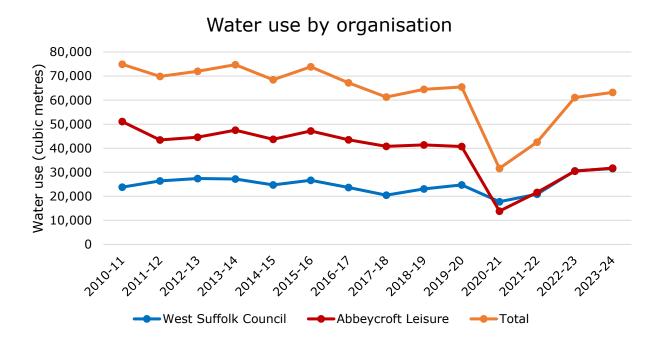
Water consumption (m³)	
West Suffolk Council baseline consumption in 2010	23,827
West Suffolk Council consumption in 2023-24	31,534
Abbeycroft Leisure baseline consumption in 2010	51,076
Abbeycroft Leisure consumption in 2023-24	31,705
Total baseline consumption in 2010	74,903
Total consumption in 2023-24	63,239

This section includes the total of water consumption from all WSC owned and operated properties, as well as those run by ACL. Total water consumption contributed 24tCO₂e during 2022-23.

Total water consumption has decreased by 16 per cent compared to the 2010 baseline and consumption has increased by 4 per cent compared to 2022-23.

This is comprised of a 3 per cent increase in water consumption for WSC and a 4 percent increase for ACL. Figure 9 shows the change in total water consumption over time and by organisation. The council continues to install water saving taps that started with publicly accessible sites to reduce water consumption.

Figure 9 – Chart showing total water consumption by year



7. Office waste

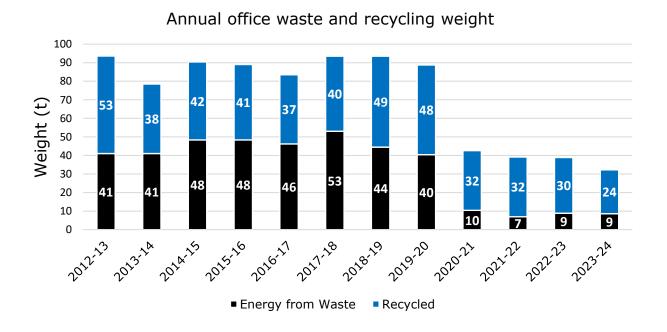
Target: To increase the office waste recycling rate and decrease the total waste arising from council operations from the baseline year 2018.

Waste arisings	Tonnes (t) or percentage
Baseline 2018	93.53t
Waste arisings in 2023-24	32.22t
Recycling rate 2023-24	73.31 per cent

During 2023-24, the total amount of waste generated was 32.22 tonnes. Of this, residual waste accounted for 8.6 tonnes and recycling was 23.62 tonnes.

Figure 10 shows the proportion of waste recycled compared to that sent to the Energy from Waste (EfW) centre each year. EfW aims to move waste up the waste hierarchy, unlocking useful electricity from waste which would otherwise have gone to landfill. More information on the Suffolk EfW facility can be found at <u>Suffolk EfW</u>.

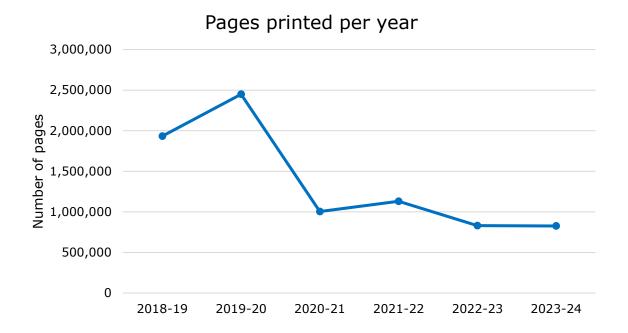
Figure 10 – Chart showing annual office waste and recycling weights.



Office printing

In 2023-24, 826,087 pages were printed. This is a 1 per cent decrease from 2022-23 and is 66 per cent lower than 2018-19.

Figure 11 – Chart showing number of pages printed per year.



8. Biodiversity and parks

Target: Maintain or increase the number of green flag accredited sites compared to the baseline year 2016.

Green flag status

The following sites successfully retained Green Flag accreditation during 2021-22:

- Abbey Gardens, Bury St Edmunds
- Aspal Close, Mildenhall
- Brandon Country Park, Brandon
- East Town Park, Haverhill
- Nowton Park, Bury St Edmunds
- West Stow Country Park, Bury St Edmunds

More information on Green Flag Awards can be found at Green Flag Award.

The number of trees planted in on council owned land was 136 trees and 600 whips.

New Park Guides

A new pull-out guide has been produced that details all you need to know about the main 5 parks and many more green spaces. The guide is currently available from the Apex and park cafes see Figure 12.



Figure 12 - Parks guide

Ongoing biodiversity and natural environment programmes

Brandon Country Park

Rangers and volunteers have been helping to make a variety of environmental improvements at Brandon Country Park including whip planting to act as screening behind the new Fire Crest Community Theatre, an initiative working with the Brandon Creative Forum.





Making bug hotels in the walled garden and sowing wildflowers in the main lawn area-





East Town Park

Crested cow wheat has been discovered on Millfield's Way County Wildlife Site; the Rangers and volunteers have made a concerted effort to encourage this nationally rare plant with great success.



Abbey Gardens

The Friends of Abbey Gardens and two local schools planted naturalising bulbs either side of the main avenue in the Abbey Gardens. A variety of different species of native bulbs were chosen to encourage local wildlife such as bees and butterflies.









Abbey Gardens hosting Abbey Alive BioBlitz event

A Bioblitz event was held in the Abbey Gardens on May 19th & 20th. The event was arranged by the Bury Water Meadows Group and West Suffolk Hive. A variety of activities was undertaken during the 2 days including interactive walks, talks, school activities and entertainment.



Hedgehog Awareness

The council's landscape teams are continuing to support hedgehog awareness by adding informative stickers to machinery and staff training to raise awareness.





Hedgehog awareness sticker on strimmer & hedgehog in Abbey Gardens

The Rural England Prosperity Fund Projects

Projects have been completed at Brandon, Mildenhall and Newmarket.



Extending and improving the Northern section of the Yellow Brick Road Linear Park in Newmarket linking to the Guarded Orchard.



Prior to work Dilapidated boundary walls



Post work.

Walls removed, ground recontoured and seeded, new brick piers installed to secure neighbouring walls. Knee-high rails installed to deter vehicular access

Reviewing the corner greens at Breckland way, Mildenhall to address the dilapidated boundaries.

Refurbishing the infrastructure at the Terry Hagger Memorial Garden memorial and relandscaping the communal area.



Infrastructure improvements and new planting at Rought Avenue Community Open Space, biodiversity enhancements including sowing a grass and wildflower mix and new planting.

9. Environmental compliance

Target: No incidents leading to formal action being taken by regulatory bodies.

Target date: Ongoing

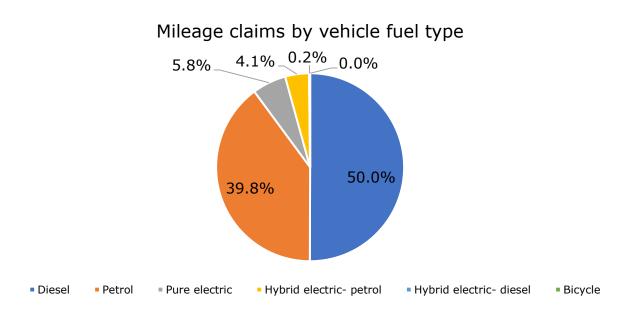
The council continues to maintain environmental permits for two operational sites located in Bury St Edmunds and Haverhill, which are used to support the strategic management of West Suffolk's municipal waste. The Environment Agency and the Health and Safety Executive (HSE) have carried out regulatory inspections and reported there have been no compliance issues, breaches of the permit conditions or any action required by them in any aspects of the requirements.

We eagerly await the central government reforms to waste collection in England. In the meantime, we continue to work closely with strategic partners to meet the forthcoming challenges and to maintain compliance while ensuring that waste collected is managed in a safe, efficient, and cost-effective way.

Appendix 1

Figure 13 shows the breakdown of mileage claims by vehicle fuel type.

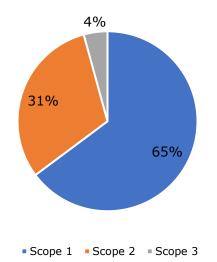
Figure 13 - Total mileage claims by fuel type



Appendix 2 Emissions scopes

Figure 14 shows the total greenhouse gas emissions by reporting scope. The greatest proportion of emissions originates from Scope 1, referred to as direct emissions; this includes emissions from the consumption of gas and owned transport. Table 2 details where each source of emissions sits within the reporting framework.

Figure 14 - Total emissions by reporting scope.



Emissions by scope 2023-24

Table 2 – Sources of emissions by scope

Emissions scopes	Activity	Emissions
Scope 1 – direct emissions Emissions from the activities of an organisation or under its control.	WSC gas consumptionWSC owned transportWSC propaneACL gas consumptionACL biomass	3,226tCO₂e
Scope 2 – indirect emissions Emissions from electricity or other energy purchased and used by the organisation. These emissions are created during the production of the energy by another before they are used by the organisation.	 WSC purchased electricity ACL purchased electricity 	1,540tCO₂e
Scope 3 – all other indirect emissions All other indirect emissions from activities of the organisation, occurring from sources that it does not own or control. The council currently only reports key Scope 3 emissions sources.	 WSC purchased electricity transmission and distribution ACL purchased electricity transmission and distribution WSC public transport WSC water consumption and treatment ACL water consumption and treatment WSC pool cars WSC staff and councillor mileage in personal vehicles 	212tCO₂e
Total emissions		4,979tCO ₂ e
Emissions per resident Resident population: 179,948 Data source: Suffolk Observatory		27.67KgCO₂e/ resident
Out of scope Direct carbon dioxide impact of burning biomass and biofuels where the Scope 1 impact of these fuels has been determined to be net zero – since the fuel source itself absorbs an equivalent amount of CO ₂ e during the growth phase as the amount of CO ₂ e released through combustion.	 WSC fuel consumption with average biofuel blend WSC biomass use ACL biomass use 	59tCO₂e

Notes

- Calculations include floor area apportionment for gas, electricity & water at Mildenhall Hub.
- Calculations exclude water consumption and use estimated data for gas and electricity at Skyliner leisure centre due to metering issues.
- Gas consumption at Haverhill leisure centre is estimated using last year's data.
- The council is working to secure accurate data where omitted and the environmental statement will be updated once data becomes available.