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West Suffolk Council Environmental Statement 2022-2023





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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 2023.

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</u> and <u>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 1.



Overview of environmental performance during 2022-2023

Emissions



40%

Reduction in total emissions compared to 2010 baseline

Up 1.4% compared to 2021-22



9%

Reduction in total owned vehicle emissions compared to 2019-20 baseline

Down by 0.3% compared to 2021-22

Consumption and energy



135%

Increase in renewable energy generated compared to 2012 baseline

Down 1% compared to 2021-22

66%



Less business travel compared to 2010 baseline

Business travel up 7% compared to 2021-22



18%

Reduction in total water consumption compared to baseline

Up 44% compared to 2021-22



58%

Reduction in total West Suffolk House waste compared to 2012 baseline

Down 1% compared to 2021-22



29%

Reduction in office printing compared to 2021-22



Infastructure and Recycling





Energy delivered to drivers powered 462,190 miles

Environment and green spaces







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).

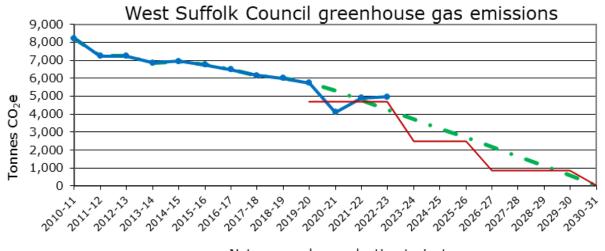
West Suffolk Council and Abbeycroft Leisure		
Baseline emissions 2010	8,215 tonnes CO2e	
Annual emissions in 2022-23	4,957 tonnes CO2e	

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.

Despite an increase in emissions compared to 2020-21 where exceptional circumstances arising from the COVID-19 pandemic resulted in building closures and travel restrictions, the combined emissions from WSC and ACL activity has continued to decrease compared to pre-pandemic levels- see Figure 1 below. Total emissions are up 1.4 per cent compared to 2021-22. There has been a 3.9 per cent increase in emissions from council activity and a 3 per cent decrease in emissions from Abbeycroft Leisure compared to 2021-22 – 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



Net zero carbon reduction trajectory

Figure 2 – Greenhouse gas emissions by organisation over time



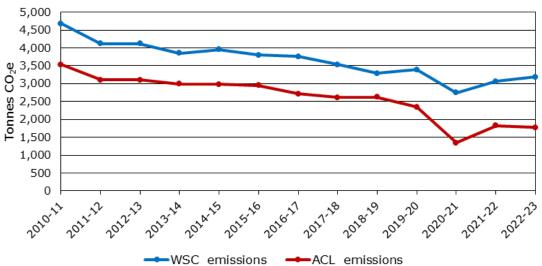
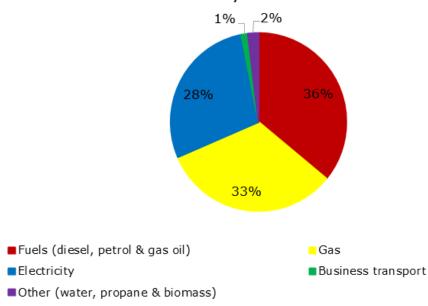


Figure 3 – Total greenhouse gas emissions by source





Notes

The gradual 'decarbonisation' of grid electricity is a key component of the UK emissions reduction targets. Emissions arising from grid supplied electricity dropped by 9 per cent in 2022 compared to 2021 data. Appendix 1 contains information on emission 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 2022-23	2,955 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 have continued to decrease following previous years when excluding 2020-21 due to building closures. In comparison to 2021-22, total emissions from buildings are down by 1.3 per cent and down by 45.6 per cent compared to 2010. Figure 4 shows the overall decrease in emissions over time.

During 2022-23, a significant investment has been made in building decarbonisation measures. The carbon impact should be visible in the 2023-24 reporting. 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:

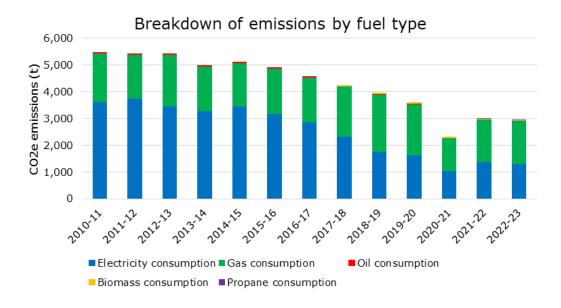
- The Apex
- The Avenue
- The Athenaeum
- Brandon country park bungalow and toilets
- Bury St Edmunds Bus Station
- East Town Park toilets
- Heldhaw Road Changing Rooms
- James Carter Road, Mildenhall
- Lake Avenue Housing
- Bury St Edmunds Leisure Centre

- 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



This year the Council was awarded Low Carbon Skills Funding to engage with consultants to produce decarbonisation plans for key buildings. The reports represent the initial stage of investigating and prioritising projects to reduce emissions, with a view to completely ending gas consumption at the selected buildings. Further analysis needs to be undertaken to refine the preliminary findings and it is the Council's aim to apply for more funding in the autumn to carry out decarbonisation works, subject to business cases. Gas consumption at all sites represents 33 per cent of total emissions.

Figure 4 - Emissions from building utility consumption over time



Electric vehicle charging

Additional public charging infrastructure was added to 16 spaces during 2022-23, and significantly more installations for public car parks are planned during 2023-24. The electricity provided to support public charging infrastructure in West Suffolk accounts for 38tCO2.



3. Renewable energy

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

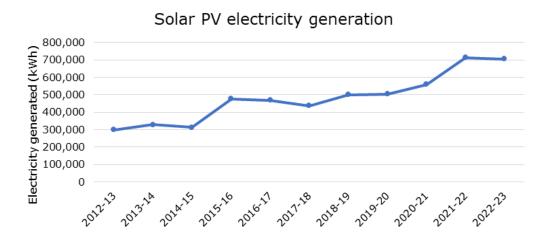
Renewable energy generated	
Baseline generation in 2012-13	300,220kWh
Generation in 2022-23	704,553kWh

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, 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 1,053 kilowatt peak (kWp) and they generated 704,553 kilowatt hours (kWh) of electricity during 2022-23, which is enough to power 198 average sized homes for the year. This figure is less than last year due to excluding Mildenhall depot and Mildenhall council offices that are no longer occupied by the council. Additional PV was installed at West Suffolk House, but not until the autumn.

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 our Solar for Business scheme. 2022-23 was a record year for installations, with 1,319 kWp installed, bringing the total to 6,463 kWp. This is not included in our carbon accounting, as electricity is consumed by third parties.



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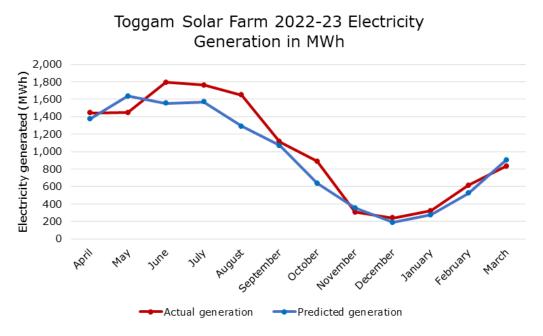
Toggam solar farm

2022-23 was the second-best performing year for the solar farm, with the site producing 12,415 megawatt an hour (MWh) of renewable electricity. The electricity that is sold into the National Grid is enough to power around 3,478 homes and offset the carbon dioxide emissions from 1,581 cars.

Over the last three years the amount generated by the solar farm has created more than £4.6million of income which after costs, has meant that £1.8m has been pumped into public services.

Figure 6 shows the target electricity generation along with actual generation for Toggam Solar Farm in 2022-23.

Figure 6 - Chart showing electricity generation during 2022-23





Toggam solar farm

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	711,309 litres	

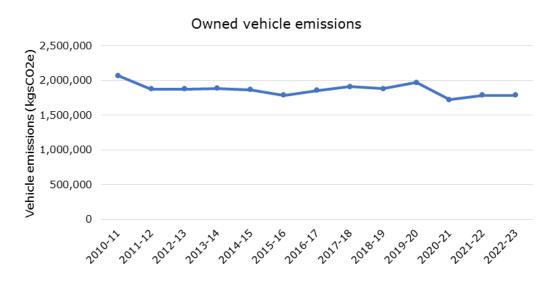
This section includes the total litres of fuel used in, but not limited to, refuse collection vehicles, road sweepers, grounds maintenance vehicles, petrol or diesel bought using fuel cards and industrial mobile machinery.

Total emissions from fuel use remains 8 per cent below the baseline year of 2019-20 and fuel use has decreased marginally by 0.7 per cent compared to 2021-22. There were 74tCO2e of out-of-scope emissions from fuel use in 2022-23. See Appendix 1 for more details on out-of-scope reporting.

The Council's electric van has travelled 7,031 miles during 2022-23, producing zero point of use emissions. Driving the electric van has saved 1.6tCO2e compared to driving the same distance using a similarly sized diesel equivalent.

This year the first wave of orders using a dedicated decarbonisation fund was made for additional electric vehicles starting with four vans and a sweeper for operational staff. Deliveries are expected during 2023-24. A press release containing further details can be found at West Suffolk Council – A budget to help West Suffolk be greener, healthier, and more prosperous is approved.

Figure 7 - Chart showing owned vehicle emissions by year





5. Business travel

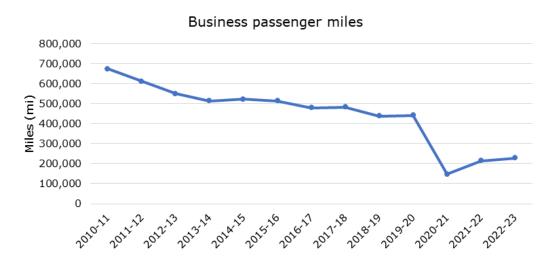
Target: Reduce the amount of grey fleet miles from the baseline year in 2010. Grey fleet includes vehicles that are owned and used by council employees.

Distance travelled	
Baseline 2010	673,285 miles
Distance travelled in 2022-23	228,863 miles

Business travel includes staff and councillor journeys, pool car use and other owned or leased vehicles. Business travel has increased 7 per cent compared to 2021-22, as shown in Figure 8 below however, the total miles travelled remains 66 per cent lower than the 2010 baseline. Business travel contributed 59tCO2e to the council's total emissions. Of the total distance travelled, private car use (grey fleet) increased by 7 per cent and pool car use decreased by 21 per cent compared to 2021-22. During 2022-23, 8 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.

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 1 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 18,637 miles during 2022-23 which was 380 per cent greater than last year. Use of public transport produced 1,075 kgCO2e during 2022-23.



6. Water consumption

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

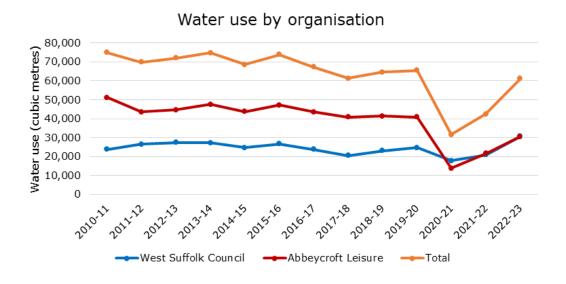
Water consumption (m3)		
West Suffolk Council baseline consumption in 2010	23,827	
West Suffolk Council consumption in 2022-23	30,623	
Abbeycroft Leisure baseline consumption in 2010	51,076	
Abbeycroft Leisure consumption in 2022-23	30,467	
Total baseline consumption in 2010	74,903	
Total consumption in 2022-23	61,089	

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 26tCO2e during 2022-23.

Total water consumption has decreased by 18 per cent compared to the 2010 baseline and consumption has increased by 44 per cent compared to 2021-22.

This is comprised of an increase in water consumption by both WSC and ACL by 47 per cent and 41 per cent respectively. Figure 9 shows the change in total water consumption over time and by organisation. The Council has started to install water saving taps starting with publicly accessible sites to reduce water consumption.

Figure 9 - Chart showing total water consumption by year





7. Office waste

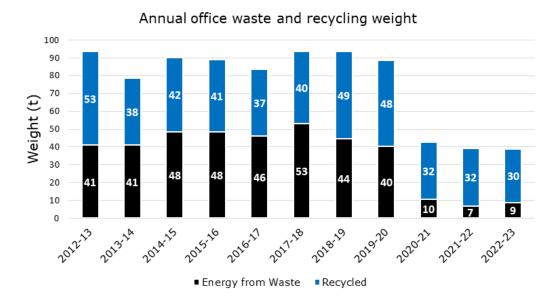
Target: To increase the office waste recycling rate and decrease the total waste arising from council operations from the baseline year 2018.

Waste arisings	Tonnes (t) or percentage	
Baseline 2018	93.53t	
Waste arisings in 2022-23	38.88t	
Recycling rate 2022-23	77.16 per cent	

During 2022-23, the total amount of waste generated was 38.88 tonnes. Of this, residual waste accounted for 8.88 tonnes and recycling was 30 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>.

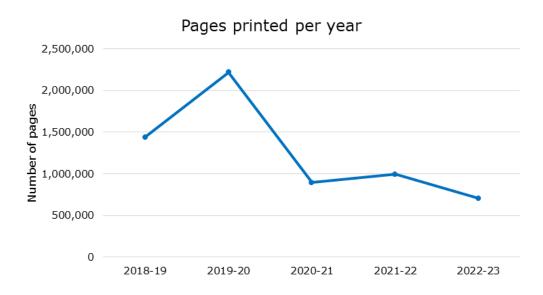
Figure 10 - Chart showing annual office waste and recycling weights



Office printing

In 2022-23, 703,951 pages were printed. This is a 29 per cent decrease from 2021-22 and is 51 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
- Nowton Park, Bury St Edmunds
- East Town Park, Haverhill
- Aspal Close, Mildenhall
- Brandon Country Park, Brandon
- West Stow Country Park.

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

The number of trees planted in on council owned land was 454 trees and 1419 whips.

Ongoing biodiversity and natural environment programmes

Tree Planting taking place at Nowton Park

Nowton Park is taking part in a project to conserve the nationally rare native Black Poplar tree by growing on cuttings of the Black Poplar clone types found in Suffolk. According to the Forestry Commission, Black poplar (Populus nigra ssp. Betulifolia) is the most endangered native timber tree in Britain. The tree is beneficial for wildlife being the food plant for moth caterpillars, bees, birds and insects.





48 cuttings of Black Poplar being grown in the walled garden at Nowton Park

In addition to the Black Poplar a variety of other tree species have been planted at Nowton Park including Wild Service Trees (Sorbus torminalis), Horse Chestnut (Aesculus hippocastanum), Common Walnut (Juglans regia) and Japanese Elm (Zelkova serrata).



Habitat and Pond Restoration at Nowton Park

Rangers have been working with Nowton Park volunteers to create a new pond habitat in the Woodland Garden planted with reeds and lilies and to restore the larger Meadow Pond. Together these habitats will help support a variety of wildlife including frogs, dragonflies, water snails, grass snakes, brown carp, moorhen and deer. Meadow Pond would have originally been dug as a cattle pond. It's great for all sorts of wildlife, including toads, frogs, grass snakes, dragonflies, moorhens and much more.









Woodland pond



Tree Planting at East Town Park

New sponsored fruit trees have been planted in the Heritage Orchard at East Town Park. The recent additions are the Lord Stradbroke apple discovered by the Earl of Stradbroke's Head Gardener at Henham Hall, Suffolk in about 1900, Coe's Golden Drop plum a very old (C1800) Suffolk bred late dessert plum, and a Bramley apple grafted from the original Bramley tree now over 200 years old.



Willow cutting at East Town Park

Rangers and Park Volunteers carry out conservation work throughout the year to maintain and enhance habitats for wildlife. The volunteers at East Town Park are coppicing willow, which is used for basket weaving, part of the natural heritage of Haverhill.







Bicycle rack installed in Abbey Gardens

A new cycle rack was installed in October 2022 underneath the Dovecote in the East Gate Nursery area within Abbey Gardens, helping visitors to reduce transport emissions while visiting the park.



Water Meadows Management Plans

We are working in partnership with the Bury Water Meadows Group (BWMG) on the Water Meadows Management Plans. Our partnership with BWMG facilitates the monitoring and improvement of these historic landscape features, engaging the local community and raising public awareness of their importance for nature.





Wildflower signs to show designated spaces that are being left to increase biodiversity



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.



West Suffolk Council's first electric street sweeper at work in Haverhill



Appendix 1 Emissions scopes

Figure 18 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 18 - Total emissions by reporting scope

Emissions by scope 2022-23

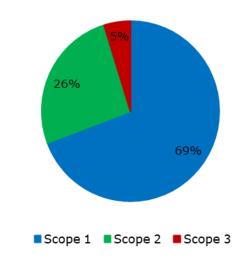


Table 2 – Sources of emissions by scope

Emissions scopes	Activity	Emissions
Scope 1 – direct emissions Emissions from the activities of an organisation or under its control.	 WSC gas consumption WSC owned transport WSC propane ACL gas consumption ACL biomass 	3,434tCO2e
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 	1,286tCO2e
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 WSC use of public transport 	238tCO2e
Total emissions		4,957tCO2e
Emissions per resident Resident population: 179,948 Data source: Suffolk Observatory		27.55KgCO2e/ 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 CO2e during the growth phase as the amount of CO2e released through combustion.	 WSC fuel consumption with average biofuel blend WSC biomass use ACL biomass use 	133tCO2e

Notes

- Out of scope emissions figure included for fuels with biogenic component following SECR guidelines.
- Calculations include floor area apportionment for gas and electricity at Mildenhall Hub.
- Calculations exclude water consumption at Skyliner leisure centre due to metering issues.
- Emissions from streetlighting and public EV charging included for first time.
- The council is working to secure accurate data where omitted and the environmental statement will be updated once data becomes available.



