



Environmental Statement 2020-2021









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1. Introduction

This report is a summary of the outcome of the activities West Suffolk Council (WSC) undertook to manage and reduce its environmental impact during the year ending 31 March 2021.

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 taskforce and developed an action plan to achieve them. The Environmental Management Group has cross Council membership with progress included in the annual report.

The council reports emissions using Carbon Dioxide equivalent (CO_2e) which 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.

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 March 2023	4,675 tCO₂e per year	18,700 tCO ₂ e
Second	April 2023 to March 2026	2,484 tCO₂e per year	8,292 tCO₂e
Third	April 2026 to March 2030	840 tCO ₂ e per year	2,520 tCO₂e
Fourth	2030-31	Net zero emissions	

There is a significant amount of work which contributes to improving the environment carried out by the council directly and with partners which is not covered in this statement. More information can be found on the council's webpage - <u>Protecting our environment</u>.

While the council did play a vital role in tackling the pandemic, helping businesses, our communities and delivering services it continued a range of initiatives as part of its climate change and environmental work. Updates were included for members from the Leader of the Council throughout this time. While the pandemic had an impact on some targets and work it also saw some services being delivered in more environmentally friendly ways and communities championing greener ways of living.

Despite the pandemic the council has continued to make progress on many of its targets and is building on new and existing initiatives. The projects undertaken and progress made is outlined in Section 2 and within the main report.

The report is structured by theme with highlights set out below. For ease, each icon contains a hyperlink to the relevant section of the report.

3

Overview of environmental performance during 2020-21



Reduction in total emissions compared to 2010 baseline

Total emissions down 28.6% compared to last year



11%

Reduction in total council fuel use compared to last year

Total owned vehicle emissions have decreased by 17% compared to 2010-11 baseline



6

86%

Renewable energy

generated up by 11% compared to last year

Green Flag status parks held during 2020-21 regaining Green Flag status for West Stow park

Increase in renewable energy

generated compared to 2012



58%

Reduction in total water consumption compared to baseline

52% Reduction in total water consumption compared to last year



75.5%

Recycling rate, which is up 39% compared to last year

52% Reduction in total office waste compared to last year



41

Electric vehicles can be charged at the same time using public chargers installed by WSC



1,500

plants and trees planted during 2020-21



78%

Less business travel compared to 2010 baseline

Business travel down 67% compared to last year

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 (CO_2e).

West Suffolk Council and Abbeycroft Leisure		
Baseline emissions 2010	8,215 tonnes CO ₂ e	
Annual emissions in 2020-21	4,093 tonnes CO₂e	

Carbon Dioxide equivalent (CO_2e) 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.

The combined emissions from West Suffolk Council and ACL activity has continued to decrease, during 2020-21 emissions decreased by 28.6% to the previous year - see Figure 1 below. Of this total there has been a 18.8% decrease in emissions from council activity and a 42.2% decrease in emissions from Abbeycroft Leisure - see Figure 2 on the next page. While COVID-19 has had an impact these buildings in the main still had to be run and were used by various staff and agencies through this time.

Figure 1 Combined greenhouse gas emissions by year

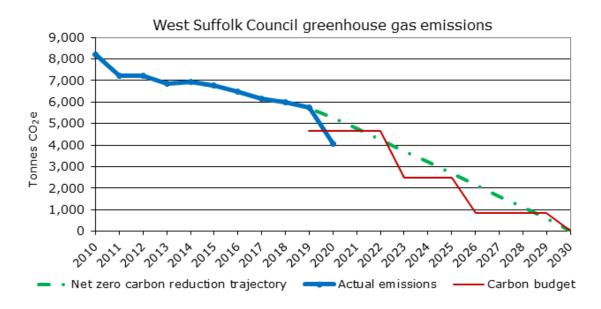
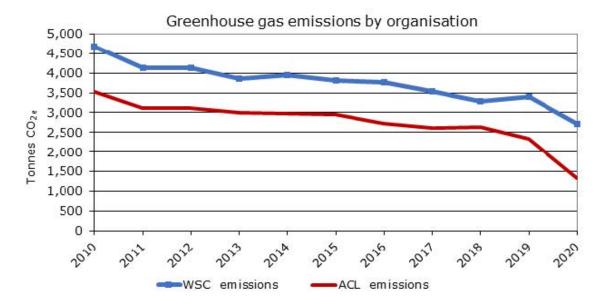




Figure 2 Greenhouse gas emissions by organisation over time



Impact of COVID-19 on environmental performance

The pandemic has affected the council as it has other organisations globally. The restrictions put in place mean that our offices had minimal occupancy, however, many services have still required vehicles or staff working in our communities. These changes to operation and occupancy are reflected in the marked decrease in environmental impacts set out in the 2020-21 environmental statement.

The environmental statement shows reductions in waste, energy consumption and business travel. All of which are dependent on people using our buildings. Fuel consumed for refuse collection and other services requiring vehicle movements have shown a slight reduction.

The council recognises the potential for a shift in emissions caused by working at home however, calculating the exact impact of this is complex and depends on variables such as building age, type, and number of occupants, none of which the council holds data for. Should home working be significant during 2021-22 the council will develop a representation of the potential impact since lockdown began.

Moving forward, the council will continue to learn from the effects of the pandemic and look for further opportunities. We hope to continue to improve our performance and lock in the benefits of some of the lessons learned.

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% in 2020 compared to 2019 data. Appendix 1 contains information on emissions reporting scopes.





2. Building energy use

Target: to meet the net zero emissions target we will reduce energy consumption from buildings operated in 2019-20 by 50% by 2025.

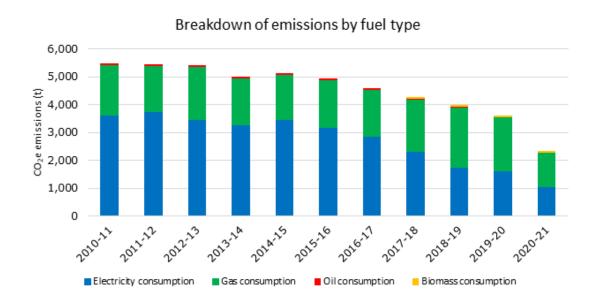
West Suffolk Council and Abbeycroft Leisure		
Emissions in 2010	5,436 tonnes CO₂e	
Emissions in 2020-21	2,298 tonnes CO₂e	

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. In comparison to 2019-20, total emissions from buildings are down by 35.6% and down by 58% compared to 2010. Figure 3 shows the decrease in emissions over time.

The decrease in emissions is a result of a reduction in total gas emissions of 35.2%, a reduction in electricity emissions of 35.7% and an end to oil consumption at West Stow park. There was a small increase in emissions from biomass consumption of 0.36 tCO $_2$ e. There was an increase in WSC gas consumption of 3% due to increased ventilation requirements for occupancy during the COVID-19 pandemic.

Since October 2020 the council has purchased 100% renewable energy generated from solar, wind and hydro sources - more information on the fuel mix can be found at - $\underline{\text{Ecotricity - Our fuel mix}}$. Under dual emissions reporting the council's switch to purchasing renewable energy saved 689.5 tCO₂e however, we report emissions from electricity consumption using location-based grid average emission factors as per Streamlined Energy and Carbon Reporting legislation.

Figure 3 Emissions from building utility consumption over time



Some notable property projects this year which have contributed to the above changes include:

- energy efficiency LED lighting installed through the first-floor offices at West Suffolk House
- electric vehicle rapid charger James Carter Road Mildenhall.



3. Renewable energy

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

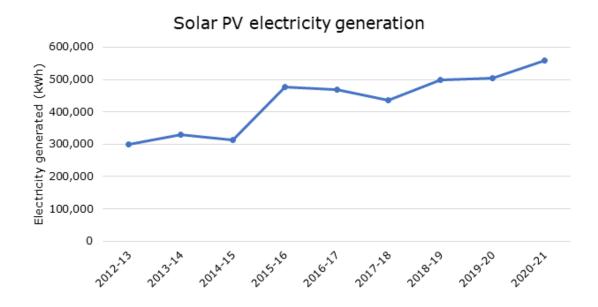
Renewable energy generated (kWh - kilowatt an hour)		
Baseline generation in 2012-13	300,220kWh	
Generation in 2020-21	559,058kWh	

The council has installed solar photovoltaic (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 807kWp and they generated 559,058kWh of electricity during 2020-21 which is enough to power 157 average sized homes for the year – more than previous years.

Figure 4 below shows the amount of electricity generated by year which is generally increasing over time.

Figure 4 Annual renewable electricity generation on council properties

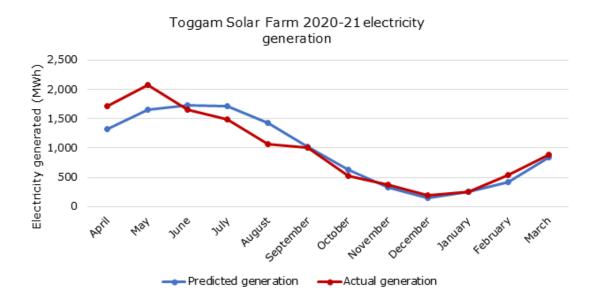




Toggam solar farm

2020-21 was another good year for electricity generation at the solar farm. Toggam Solar Farm generated 11,788MWh (megawatt an hour) of electricity compared to a target of 11,507MWh. This was lower than the previous year due to broken transformer impacting 20% of the site during August and September. The electricity that is sold into the National Grid is enough to power around 3,300 homes and offset the carbon dioxide emissions from 1,500 cars. The value of the electricity generated from the site was worth £1.3 million for the year. Figure 5 below shows the target electricity generation along with actual generation for Toggam Solar Farm.

Figure 5 Chart showing electricity generation during 2020-21



Renewable heat

The council continues to identify ways to reduce greenhouse gas emissions by switching to renewable heat technologies. It has previously installed ground source heat pumps in West Suffolk House and The Apex in Bury St Edmunds and a biomass wood chip boiler at The National Horse Racing Museum fuelled by wood chip produced locally and supplied by the Jockey Club Estates.

In 2020-21 the council installed a ground source heat pump to replace the oil boiler at West Stow and supported the Bardwell Playing Fields Association with the installation of an air source heat pump at their new pavilion.



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 2020-21	686,136 litres	

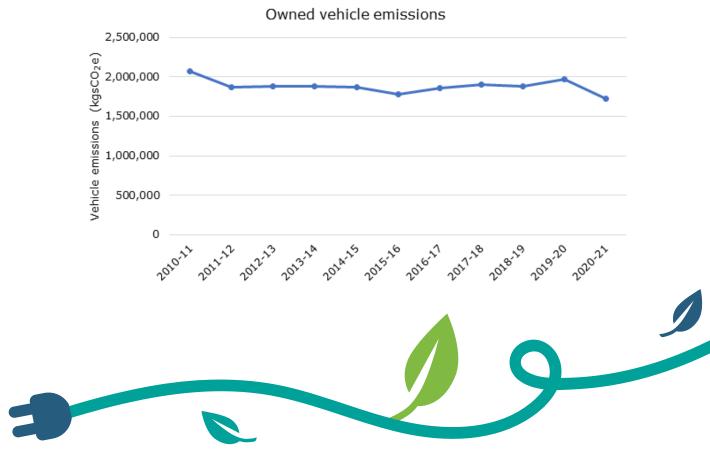
This section includes the total litres of fuel used in, but not limited to, refuse collection vehicles, road sweepers, grounds maintenance vehicles, petrol or diesel bought using fuel cards, and industrial mobile machinery. In 2019-20 the council have updated the process for reporting on fuel use and will be reporting on total fuel consumption rather than fleet consumption to ensure an accurate emissions figure.

Total owned vehicle emissions have decreased by 17% compared to 2010-21 baseline.

Total fuel use has decreased by 11% compared to 2019-20.

The council's electric van has travelled 2,075mi since it was purchased last year producing zero point of use emissions. Feedback from those driving the electric van has been positive and the council is looking to switch other fleet vehicles to zero emission alternatives as part of its fleet renewal programme. It is anticipated that the next vehicles to be swapped to electric alternatives will be supervisor vans and our fleet management team will be trialling further electric vehicles as COVID-19 restrictions end. Where possible the operations team are investing in electric and rechargeable tools rather than fossil fuel driven ones.

Figure 6 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 2020-21	146,924 miles

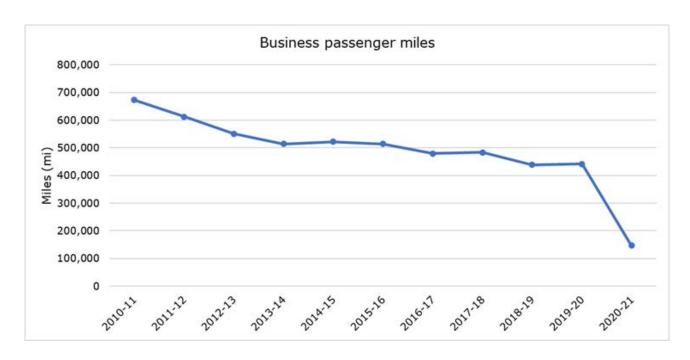
Business travel includes staff and councillor journeys, pool car use and other owned or leased vehicles. Business passenger miles have decreased by 67% compared to 2019-20 as shown in Figure 7 below.

Of the total distance travelled, private car use (grey fleet) decreased by 65% and pool car use fell by 92% from 33,466mi to 2,822mi.

Our pool car service is now provided by a third party however, we will account for the emissions resulting from pool car usage as they are a direct result of staff activity.

The introduction of COVID-19 lockdown measures has changed the way we deliver our services and switching to online meetings have contributed significantly to reduced business travel.

Figure 7 Chart showing business passenger miles travelled



6. Water consumption

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

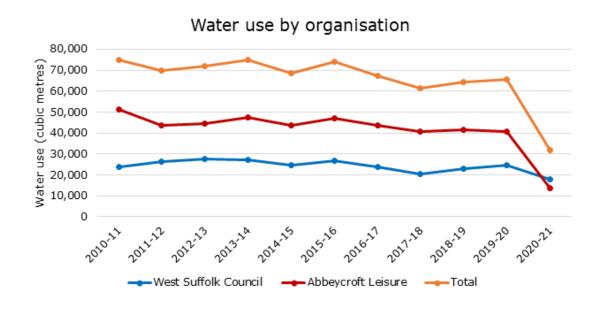
Water consumption (m³)		
West Suffolk Council baseline consumption in 2010	23,827	
West Suffolk Council consumption in 2020-21	17,778	
Abbeycroft Leisure baseline consumption in 2010	51,076	
Abbeycroft Leisure Consumption in 2020-21	13,850	
Total baseline consumption in 2010	74,903	
Total consumption in 2020-21	31,628	

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 has decreased by 58% compared to the 2010 baseline and 52% compared to 2019-20. This is comprised of a decrease in water consumption by both West Suffolk Council and ACL by 28% and 66% respectively. Figure 8 shows the change in total water consumption over time and by organisation.

The reduction on ACL water consumption is linked to changes in occupancy as a response to the COVID-19 pandemic.

Figure 8 Chart showing total water consumption by year

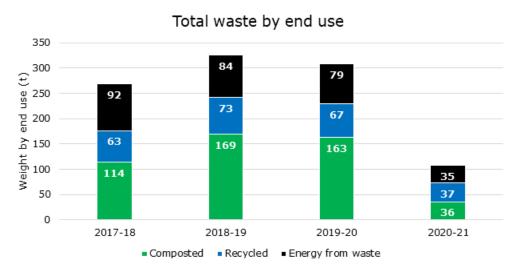


7. Corporate waste

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

Figure 9 below shows the weight of key waste streams generated from WSC activity and their disposal method. Compared to 2019-20 there has been a 65% decrease in total waste generated.

Figure 9 Chart showing waste by end use and total waste arisings



Office waste

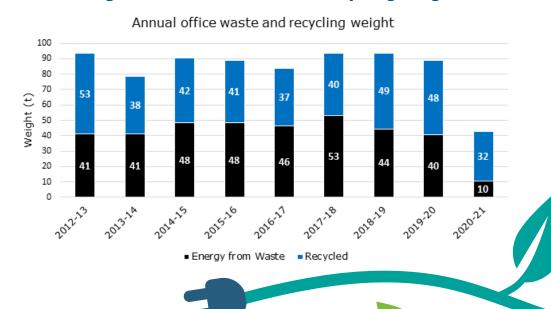
During 2020-21 the total amount of waste generated was 42.56 tonnes, of this residual waste accounted for 10.44 tonnes and recycling was 32.12 tonnes.

The proportion of waste that is recycled has increased for the third consecutive year to 75.47%. This represents an increase in the recycling rate of 39% compared to 2019-20.

When staff are working in our offices for more of the time, we will schedule another waste audit of one of our buildings to continue to improve pro-recycling communications.

Figure 10 below shows the proportion of waste recycled compared to that sent to 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



8. Biodiversity and parks

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

Green flag status

The following sites successfully gained Green Flag accreditation during 2020-21:

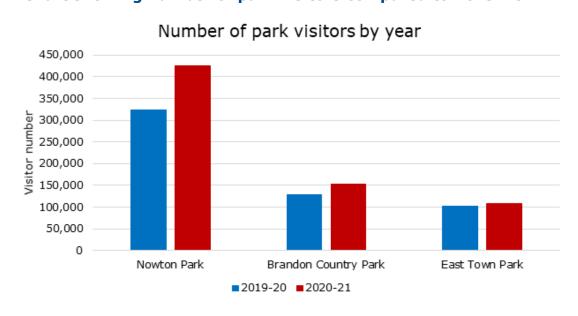
- 1. Abbey Gardens, Bury St Edmunds (retained)
- 2. Nowton Park, Bury St Edmunds (retained)
- 3. East Town Park, Haverhill (retained)
- 4. Aspal Close, Mildenhall (retained)
- 5. Brandon Country Park, Brandon (retained)
- 6. West Stow Country Park (new)

During 2020-21 we regained the Green Flag status for West Stow Country Park. The park supports a total of 806 priority UK Biodiversity Action Plan species including birds, amphibians and reptiles, plants, fungi, bats, and moths. In 2021-22 we hope to retain the green flag status for all six sites. More information on Green Flag Awards can be found at Green Flag Award.

Use of parks and other public open spaces during the COVID-19 pandemic

This past year has seen a rise in footfall of visitors to our parks and open spaces, with the greatest increase at Nowton Park at 31% compared to 2019-20. Figure 11 shows visitor footfall occurring from April to March between 2019-20 and 2020-21.

Figure 11 Chart showing number of park visitors compared to 2019-20



With the increase in footfall has come the challenge of protecting key areas of significance for nature conservation. To help better inform visitors of key areas of interest we have been reviewing site signage, promoting anti littering and dog fouling campaigns on our site Facebook pages.



Ongoing biodiversity and natural environment programmes

GIS mapping (Geographic Information System)

We are digitally mapping the various green space features within West Suffolk. Areas higher in biodiversity are being identified on the council's GIS system and suitable maintenance regimes implemented to support these areas.

Example of mapping environments



Encouraging and protecting habitats

The Brandon Roadside Nature Reserve on the London Road Industrial Estate has now been designated a Site of Special Scientific Interest (SSSI) due to the success of the Field Wormwood Plant (Artemesia campestris) and the more important and rarer Wormwood Moonshiner Beetle.

The Saxongate Nature Reserve in Bury St Edmunds is being managed to support a variety of wildlife including Frogs and toads and the ponds at East Town Park are managed to support a variety of wildlife.

Landscape planting

The newly established landscape planting at the Mildenhall Hub includes 2.5 hectares of meadow and habitat seed mixes (wildflower, floral lawn, wetland and hedgerow), 300 trees and 1,709 native shrubs.

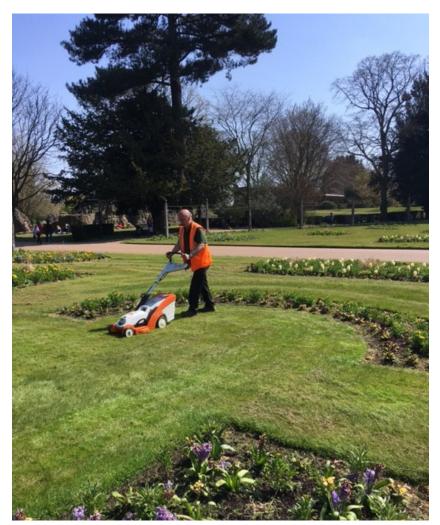
Abbey Gardens

In July 2020 the extension of the Abbey Gardens into the former plant growing nursery known as Eastgate nursery was open to the public. The extension includes a new path which provides easier pedestrian access between Ram Meadow and No Mans Meadows. A new wildflower labyrinth was sown on the site of the former tennis court area in spring 2020.



Reduction of fossil fuel use in the Parks Service

Following the successful replacement of certain items of motorised equipment at Nowton Park last year the equipment used by the team of staff in the Abbey Gardens is also now being replaced. As well as being more environmentally friendly the new equipment is quieter.







9. Environmental compliance

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

Target date: Ongoing

The council currently maintains 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. There have been no compliance issues, breaches of the permit conditions or action taken by a regulatory body. In 2020, the council also successfully surrendered the Environmental Permit for the former depot site in Bury St Edmunds.

Moving forward, we are working with strategic partners to maintain compliance while ensuring that waste collected is managed in a safe, efficient and effective way.



Appendix 1

Emissions scopes

Figure 12 shows the total greenhouse gas emissions by reporting scope. The greatest proportion of emissions originate from Scope 1, referred to as direct emissions; this includes emissions from the consumption of gas and owned transport. Table 3 details where each source of emissions sits within the reporting framework.

Figure 12 Total emissions by reporting scope

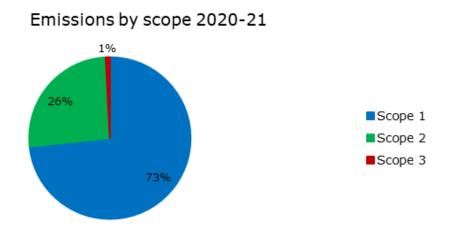


Table 3 Sources of emissions by scope

Emissions scopes	
Scope 1 – direct emissions Emissions from the activities of an organisation or under their control.	WSC biomass WSC gas consumption WSC heating oil WSC owned transport ACL biomass ACL gas consumption
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
Scope 3 – all other indirect emissions All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control. The council currently only reports key Scope 3 emissions sources.	WSC public transport WSC water consumption ACL water consumption Pool cars Staff and councillor mileage





