Annual greenhouse gas emissions report for 2022 and carbon reduction programme update

carbon neutral 2030

Tewkesbury Borough Council

Carbon Literate Organisation Bronze

SOUTH WEST ENGLAND ENERGY EFFICIENCY REGIONAL AWARDS WINNER COUNCIL OF THE YEAR 2023

Introduction

Tewkesbury Borough Council declared a climate emergency at full council on 1st October 2019 and has committed to making its offices carbon neutral by 2030.

A baselining exercise of the Council's greenhouse gas emissions was undertaken (in 2020) and a Carbon Reduction programme was established soon after.

More recently in May 2023, the Council passed a motion to expand this declaration to a Borough wide climate emergency, also declaring a nature (ecological) emergency.

Currently, there is no legal requirement for Local Authorities to report on their organisational carbon footprint, however, the Council is committed to its carbon neutral ambition and publicising its greenhouse gas emissions annually.

Part 1 of this report covers the Council's greenhouse gas emissions in 2022.

Part 2 reviews the progress of the Council's carbon reduction programme.

Part 3 presents an action plan for the year ahead.

PART 1 GREENHOUSE GAS EMISSIONS REPORTING

Organisational Boundary & Scope

For the purpose of this report, the scope of the emissions reporting is limited to the original declaration in 2019, but it is the intention that future emissions reports will be expanded to be considerate to the needs of the 2023 declaration.

The Council has committed to doing all in its power to become carbon neutral by 2030, specifically by addressing greenhouse gas emissions from operations for which it is directly responsible. This specifically includes the Council occupied areas of the Public Service Centre building.

In addition, the following organisational activities are reported on:

- Electricity, gas and water consumption from owned buildings that are used to provide a public service, therefore excluding any buildings used for commercial purposes. Therefore, the Council's estate included is as follows:

    - Tewkesbury Borough Council Offices – less areas occupied by tenants.
    - Tewkesbury Leisure Centre
    - Roses Theatre
    - Tewkesbury Cemetery and Bishop's Cleeve Cemetery (added 2021)
    - 7 x domestic properties providing housing support (increased from 5 properties in 2019)
    - Tirley and Deerhurst Pumping Stations (added 2021)

- Council Fleet (vehicles of waste contractors UBICO and pool cars)
- The Grey Fleet (vehicles owned and used by employees or Councillors for Council purposes)
- Office Waste from the Public Service Centre (added from 2021)

Reporting Period

This reports on the period 1st January 2022 to 31st December 2022 with comparisons to the baseline year 2019 and the last reporting year 2021.

Baseline Year

The baseline year for the Council's Greenhouse Gas reporting is from 1st January 2019 to 31st December 2019.

The baseline has been revised this year to take into consideration more accurate transport data.

Conversion Factors

The greenhouse gas emissions detailed in this report have been calculated using the 2022 UK Government GHG Conversion Factors:

Greenhouse gas reporting: conversion factors 2022 - GOV.UK (www.gov.uk)

The Council reports on Scope 1,2 and 3 emissions.

Table 1 - Definition of Scope 1,2 and 3 emissions

Category	Description	Source
Scope 1	Direct emissions from activities owned or controlled by the Council.	Gas usage on the Council estate and vehicle fuel used.
Scope 2	Indirect emissions from purchasing electricity for Council operations.	Electricity consumption from the grid on the Council estate.
Scope 3	All other indirect emissions produced in relation to the organisational activity	The transmission and distribution of electricity Well to tank electricity and gas. Staff & councillor business travel Water usage Waste management Working from home emissions

Data Collection

Improvements to internal management systems has aided the data collection process, specifically with regard to energy consumption from most buildings and for office waste.

The accuracy of transport data has been significantly improved by having access this year to better fuel information. In previous reporting years, mileage figures were used to calculate emissions and, as a result, the Council's carbon footprint was underestimated.

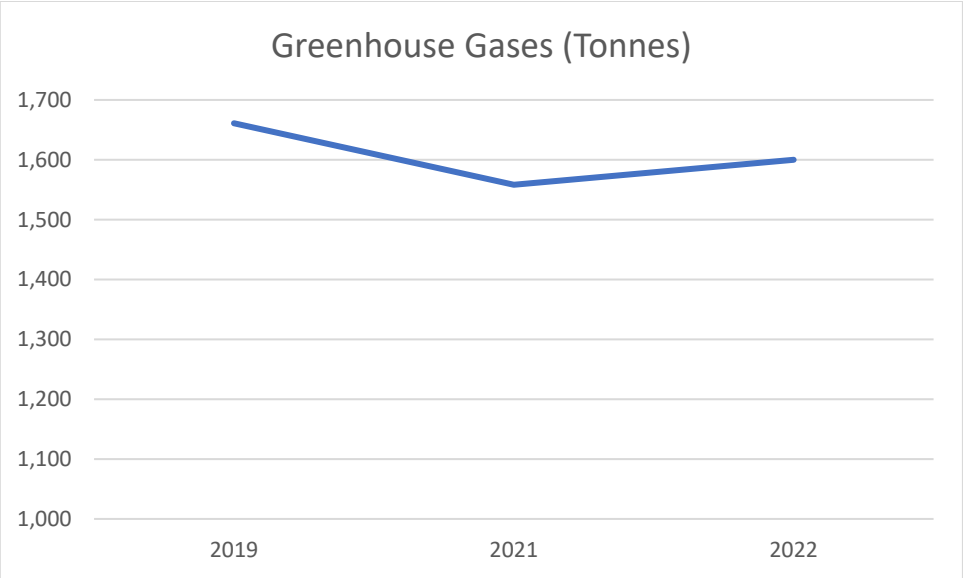
This was because the assumed greenhouse gases produced, by using the closest vehicle type in the government correlation factors, was much lower than when compared with the fuel in litres, (which is more precise as it directly links to the emissions through the combustion process).

To ensure yearly comparisons are as accurate as possible, the baseline has been reset using this new information and future years will follow this more robust methodology.

Total Emissions

Since the council's greenhouse gas tonnage baseline (revised) was established there has been a reduction of 62 tonnes. The reduction has been achieved despite factors such as the council having:

- A larger occupancy of the public service sector to consider within its carbon footprint (areas of the building occupied by other tenants are excluded).
- Increased staffing levels
- A growth in council services, which have for example led to an extra waste collection round and additional factors now included in our reporting that provide more comprehensive data.



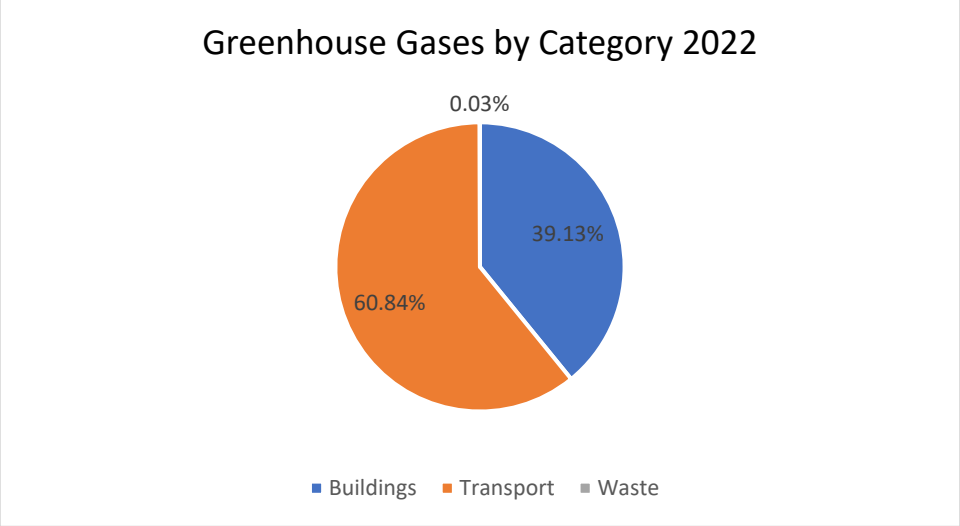
There has been an increase in the greenhouse gases reported since 2021, which is to be expected as services opened up further in 2022, following the loosening of restrictions after the Covid Pandemic. This is particularly evident at the Leisure Centre and the Roses Theatre.

Emissions By use Table

The Council's emissions (scope 1,2 & 3) can be categorised as per the table below, which show a 10.7% decrease from the 2019 baseline in building emissions, and a smaller decrease overall.

Category	2019 Emissions (T/CO2e)	2022 Emissions (T/CO2e)	% Emissions Change (-/+)
Buildings	701.0	625.9	-10.72%
Transport	960.2	973.1	1.34%
Waste	0.0	0.5	N/A
Total	**1,661**	**1,599**	**-3.72%**

The largest contributors to the Council's footprint in 2022 were from the fuel consumption (transport) and the operation of its buildings (specifically gas and electricity).



Buildings

The table below shows the total building energy consumption for relevant estate buildings (those considered to be used for the provision of core council services).

All Buildings 2019				
Fuel	kWh	T/CO_2e (Scope 1/2)	T/CO_2e (Scope 3)	T/CO_2e Total
Electricity	734,087	188	44	232
Gas	2,231,920	410	53	464
Water m^3			5	5
Total	2,966,008	598	103	**701**

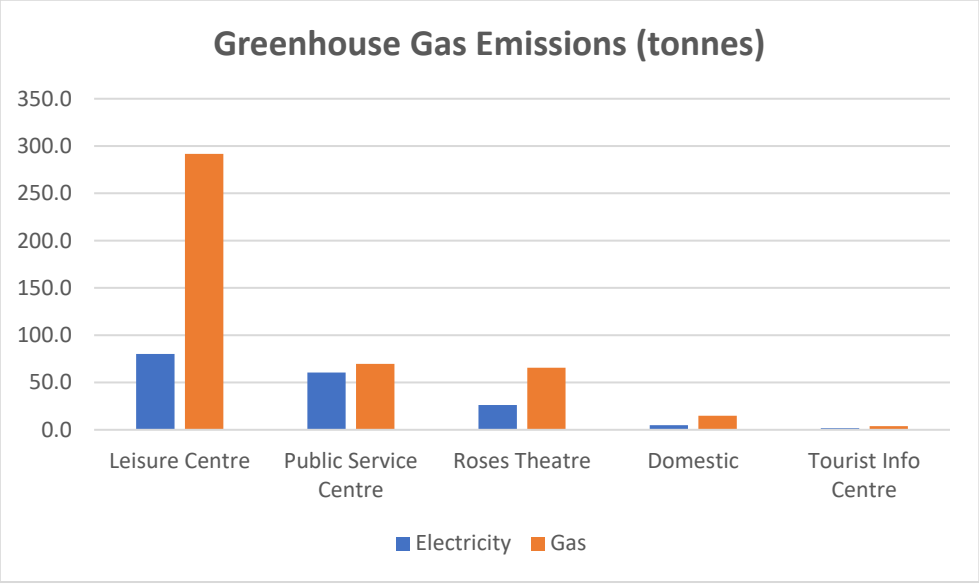
All Buildings 2022				
Fuel	kWh	T/CO_2e (Scope 1&2)	T/CO_2e (Scope 3)	T/CO_2e Total
Electricity	677,962	131	46	177
Gas	2,086,325	381	65	446
Water m^3		0	3	3
Total	2,764,287	512	114	**626**

The headline results show that in 2022 there was a 10.7% reduction in total building emissions against the 2019 baseline, which can be attributed to energy efficiency activities.

It is important to note that currently Natural Gas consumption accounts for a significant majority of our building energy consumption (75.25% in 2019 and 74.4% in 2022).

This again confirms that from a carbon neutral aspiration, actions such as changing the source of heating away from gas at the Public Service Centre will have a large impact on emissions. This should remain a priority focus of attention in relation to carbon reductions from buildings.

The table below breaks down the emissions (scope 1,2 & 3) from electricity and gas in the largest emitting buildings in 2022:



More granular analysis (building by building) of energy shows contrasting patterns in consumption. The Public Service Centre reduced electricity despite having more area under its responsibility, although gas consumption (which can be linked to weather) has increased. It is possible that hybrid working patterns, may have led to less occupancy heat gains from staff and visitors.

Public Service Centre 2019				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/ CO_{2e} Total
Electricity	267,828	68	16	85
Gas	282,424	52	7	59
Water (m3)	980	0	1	1
Total	550,253	120	24	**144**

Public Service Centre 2022				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/ CO_{2e} Total
Electricity	231,564	45	16	61
Gas	326,522	60	10	70
Water (m3)	1,964	0	1	1
Total	558,086	104	27	**131**

Rising electricity costs have been negatively impacting on the leisure sector across the UK. Tewkesbury Leisure Centre however has seen a reduction in its carbon footprint and benefits from electricity generated from the Solar Canopy.

Some of the many energy saving actions undertaken by the leisure centre include:

- Small reductions and better control of temperatures in Pool, Sauna and Reception
- Less and better use of air conditioning
- Equipment turned off earlier when not in use or in eco mode.

The carbon reporting for this year must be balanced with partial closing in early 2022 when some covid restrictions were still in place.

Tewkesbury Leisure Centre 2019				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/ CO_{2e} Total
Electricity	406,630	104	25	128
Gas	1,632,377	300	39	339
Water (m3)	4,026	0	4	4
Total	2,039,007	404	68	**472**

Tewkesbury Leisure Centre 2022				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/ CO_{2e} Total
Electricity	306,640	59	21	80
Gas	1,365,521	249	42	292
Water(m3)	4,087	0	2	2
Total	1,672,161	309	65	**374**

The Roses Theatre like the Public Service Centre has seen an increase in gas consumption and is limited by an age gas boiler system and the need for a cool auditorium in the hot summer months. Electricity usage is noticeably higher than recorded in the baseline due to a data collection error in 2019 and also higher than in 2021 (which is to be expected as the impact from Covid was still high).

The Roses Theatre 2019				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/CO_{2e} Total
Electricity	11,969	3	1	4
Gas	233,897	43	6	49
Water (m3)	0	0	0	0
Total	245,866	46	6	**52**

The Roses Theatre 2022				
Fuel	kWh	T/CO_{2e} (Scope 1/2)	T/CO_{2e} (Scope 3)	T/CO_{2e} Total
Electricity	85,025	18	7	25
Gas	344,006	63	11	74
Water (m3)	0	0	0	0
Total	429,031	81	17	**99**

Working from Home

Emissions related to staff working from home have not been incorporated this year (or included in the baseline or previous year's figures where staff having been working from home, such as during COVID).

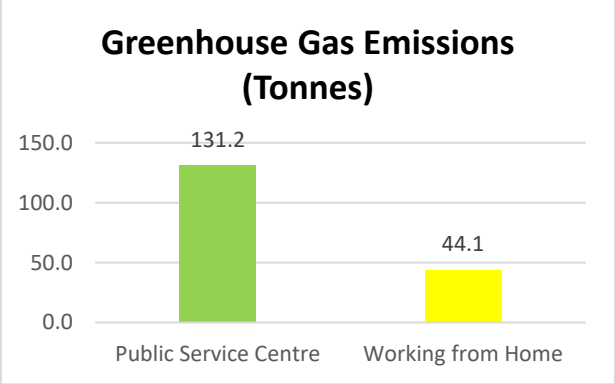
This report does however consider the impact of energy related emissions but does not have the full picture of being able to look at the resulting reduction in emissions from less commuting and so these emissions have not been included this year, in the overall emissions reporting total.

The estimated greenhouse gases produced recognises that there will be an increased level of lighting, heating and power required for equipment needed to deliver council services from staff's homes. Correlation factors are now available, while they were not available at the time of producing the 2019 Baseline.

Based on 198.6 Staff (FTE) working an average 2 days a week from home, an additional 44.1 tonnes of greenhouse gas can be attributed to the energy required to facilitate home working.

Green House Gas Emissions - Homeworking	Total Homeworking Hours	Total GHG Emissions (tonnes)	Per employee (kg)
Office Equipment & Heating	129,328	44.1	221.9

Interestingly the impact of this can be observed when comparing with the total emissions of the Public Service Centre and is equivalent to 38% of these.



However, it is important to note that we do not currently capture and measure the reduction in transport emissions from staff commuting less to the workplace as part of our reporting.

Until this is known we cannot fully understand the total impact of hybrid working and draw any conclusions about the impact of homeworking on wider greenhouse gas emissions.

Further work will be carried out during 2023/24 to establish the correct methodology for calculating the reduction in emissions for commuting and it is envisaged that both this and the emissions from homeworking will be incorporated into our data collection in the future.

Transport Emissions

Transport emissions continue to account for the largest proportion of the Council's footprint (60.8%).

The table below illustrates how this is made up.

2022 Pool Cars, Ubico & Grey Fleet: Mileage & Emissions				
Type	**Mileage**	**Scope1**	**Scope 3**	**Total**
Pool Cars	34,682	6.37	0.9	7.27
Ubico	325,832	776.7	185.2	961.9
Grey Fleet (Staff)	7,778	0.00	3.0	2.97
Grey Fleet (Councillors)	2,483	0.00	0.9	0.95
Total	**370,775**	**783.1**	**190.0**	**973.1**

Overall, Greenhouse Gas Emissions in comparison with the Baseline:

	2022	**2019**	**% Change**
Pool Cars	7.3	16.7	-56.4%
Ubico	961.9	930.9	3.3%
Grey Fleet - Staff	2.97	7.0	-57.7%
Grey Fleet – Councillors*	0.95	5.6	-83.2%
Total	973.1	960.2	1.3%

There has been a combined reduction in staff and councillor mileage and emissions as a result of increased on-line meetings and the conversion of two of the authority's pool cars to electric since 2019 (12.6 tonnes to 3.9 tonnes)

*Only the data from journeys which have been claimed by councillors are accounted for, some councillors have not submitted claims.

Waste Collection – UBICO Contract

In previous years, Waste Collection Vehicle emissions have been calculated using mileage and converted to greenhouse gases using government conversion factors.

This year we have been able to use fuel in quantities of litres instead of mileage, which provides a much more accurate calculations of emissions.

In order to use actual amounts of fuel to calculate emissions going forwards and to compare against the baseline on a like for like basis, the 2019 baseline has been adjusted using historic fuel figures providing a more accurate method of reporting.

Therefore in 2022, 961.9 tonnes of greenhouse gases can be attributed to UBICO Contract which includes Waste Collection vehicles, fuel cars and is inclusive of street sweeping and landscaping equipment. This is an increase of 30.9 tonnes from an adjusted baseline figure of 930.9 tonnes in 2019.

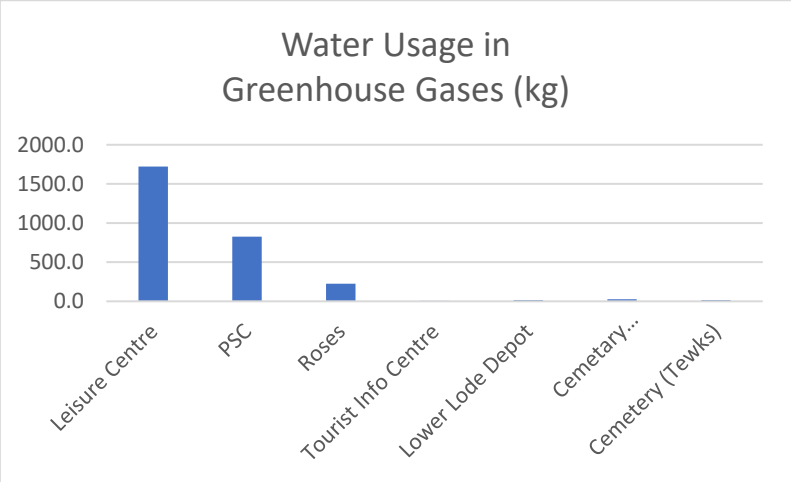
The increase in emissions can be explained by an additional collection round being undertaken since 2019 and extra mileage incurred by travelling further to the Javelin Park energy from waste plant (opened October 2019), as opposed to the transfer station in Bishop's Cleeve.

The overall highly significant proportion of greenhouse gases contributed through transport provides focus to ensure the alternative vehicles and fuels are considered for updating the vehicle fleet. However, it is very much acknowledged that there are technology restrictions and forecasted higher financial costs to incur to undertake this transformation.

Water

Water is a hugely valuable resource, which as the local (and global) population increases, will become even more important in our daily lives and scarce in some locations.

However, it is still a very small part of the Council's footprint with a value of 3.25 tonnes for water supply and treatment in 2022. This has decreased from 7.21 tonnes in 2019 since when there has been some water saving measures introduced on the Council's estate, but this reduction is primarily due to the conversion factors for water supply and treatment processes now being less carbon intensive.



Office Waste

The completeness and accuracy of data for waste generated at the Public Service Centre continues to be improved. With a full year of data including non-recycling and the inclusion of skips it is not surprising that the waste reported has increased from 2021. There is no baseline data available.

Overall PSC Waste (tonnes)	**2022**	**2021**
By Weight	17.61	13.3
Greenhouse Gases	0.51	0.28

Improvements to the office waste bins and communications on how to use them is planned in 2023.

Emissions by Scope

The table below shows a direct illustration of emissions by scope based on formal greenhouse gas protocol reporting structure. This is further broken down on the following page.

Greenhouse Gas Emissions by Scope & Element		2019		2022	
Scope	**Element**	**Emissions (T/CO2e)**	**% of Total**	**Emissions (T/CO2e)**	**% of Total**
Scope 1	Gas Consumed	410.34	25.37%	380.84	23.80%
	Owned Transport	765.16	44.93%	783.07	48.95%
	SCOPE 1 TOTAL	**1,175.50**		**1,163.91**	
Scope 2	Electricity Consumed	185.60	11.61%	131.10	8.19%
	SCOPE 2 TOTAL	**185.60**		**131.10**	
Scope 3	Extraction, refinement & transportation of Scope 1 Gas	53.37	3.30%	64.88	4.06%
	Extraction, refinement & transportation of Scope 1 Transport Fuel	182.42	10.81%	186.10	11.63%
	Extraction, refinement & transportation of Scope 2 Electricity	44.27	2.74%	46.22	2.89%
	Water	7.21	0.45%	3.25	0.20%
	Business Travel (unowned vehicles)	12.66	0.79%	3.92	0.24%
	Waste	N/A	0%	0.51	0.03%
	SCOPE 3 TOTAL	**299.93**		**304.88**	
TOTAL		1,661.03	100%	**1,599.89**	**100%**

As per the table on page 2 of this report and under the Greenhouse Gas Protocol's scope 1, 2 and 3 emissions can be defined as:

Scope 1: Direct emissions from activities owned or controlled by your organisation: *Gas & Owned Transport.*
Scope 2: Indirect energy emissions released into the atmosphere that are associated with your consumption of *purchased electricity.*
Scope 3: Other indirect emissions that are a consequence of your actions occurring at sources you do not own or control and are not classed as Scope 2 emissions. For example: *business travel (staff vehicles or public transport), waste disposal, materials or fuels (water) purchased.*

Greenhouse Gas Emissions Summary	2022 Greenhouse Gas Emissions (CO2e) Tonnes	Revised Baseline 2019 Greenhouse Gas Emissions (CO2e) Tonnes
Scope 1		
Gas - Council Offices & Buildings	62.84	54.09
Gas - Leisure Centre	249.26	300.11
Gas - Roses	56.05	43.00
Gas - Domestic Properties	13	13
UBICO Diesel	776.69	752.03
Pool Cars Petrol	6.37	13.13
Total Scope 1	**1,163.90**	**1,175.50**
Scope 2		
Electricity - Council Offices & Buildings	48.81	68.69
Electricity - Leisure Centre	59.30	103.93
Electricity - Roses	19.33	3.06
Electricity - Domestic Properties	4	10
Total Scope 2	**131.10**	**185.60**
Scope 3		
Gas (well to tank) - Council Offices & Buildings	10.71	7.03
Gas (well to tank) - Leisure Centre	42.47	39.03
Gas (well to tank) - Roses	9.55	5.59
Gas (well to tank) - Domestic Properties	2	2
Diesel (well to tank) - UBICO	185.19	178.89
Petrol (well to tank) - Pool Cars	0.9	3.53
Electricity (T&D & WTT) - Council Offices & Buildings	17.21	16.65
Electricity (T&D & WTT) - Leisure Centre	20.90	24.55
Electricity (T&D & WTT) - Roses	6.81	0.72
Electricity (T&D & WTT) - Domestic Properties	1	2
Water Supply & Treatment	3.25	7.21
Business Travel - Staff	2.97	7.02
Business Travel - Councillors	0.95	5.64
Waste Disposal (Council Building)	0.51	
Total Scope 3	**304.87**	**299.93**
Total Scope 1,2 and 3 emissions	**1,599.87**	**1,661.03**

PART 2 Carbon Reduction Programme Year 3 (2022/23) Highlights

Below are some of the key highlights of the delivery of the Carbon Reduction Programme. Performance against the objectives in the Year 3 plan can be read in the table which follows this commentary.

Solar Canopy Completion

In the Summer of 2022, Tewkesbury Borough Council installed a 230 kWp Solar Canopy at its offices, which generates renewable electricity that can be used by both the council building and the leisure centre next door.

The power generated is expected to be equivalent to around 70% of the council's electricity demand and by using less energy from the grid and less fossil fuels, the council's greenhouse gas emissions will reduce by up to 76 tonnes a year.

Funding Approval Air Source Heating

A successful application was made to the Public Sector Decarbonisation Fund 3B and £708,282 awarded in March 2023 towards replacing the aging gas fired heating system with air source heating at the Council's public service centre. This offers the opportunity to eliminate gas emissions in the building and following on from the solar canopy installation make further huge strides to making this building carbon neutral.

The contract for installing the air source heating is being tendered in July with the works scheduled for later in the year.

The new system with provide better control across all areas of the building with intelligent monitoring and management of energy usage. It will also have the ability to operate at different times across all areas of the building in line with service requirements and tenants needs.

Carbon Literacy Training

The council has been certified as a Bronze Carbon Literate Organisation by The Carbon Literary Project - A UK charity dedicated to increasing awareness of climate change and carbon footprints.

To achieve this accreditation, the council was required to demonstrate that it has a robust carbon reduction programme in place, is taking positive action and is delivering carbon literacy training and support to council officers and members. To date over 60 members of staff have undertaken the training putting forward their own ideas of how to reduce their carbon footprint not only at work but in their home life too.

Green Champion Network

Following on from the carbon literacy training we have established a Green Champion Network which is made up of 12 officers from across the organisation. The network will help develop ideas and implement carbon reduction strategies and promote them to their wider teams.

Biodiversity

Working closely with Gloucestershire County Council we have planted around 500 trees and hedges during the recent planting season, supplemented by wildflowers and establishing a maintenance programme.

SouthWest Energy Efficiency Awards

Tewkesbury Borough Council received high praise and recognition at this year's Southwest Energy Efficiency Awards (May 2023)

Council / local authority of the year - Winner

Awarded in recognition of the council's commitment to energy efficiency, including the installation of its solar canopy and plans for an air source heating project at its Public Services Centre in Tewkesbury.

The award also recognised the wider participation of the council's staff, including the completion of carbon literacy training, the forming of a Green Champion network to encourage environmentally friendly behaviour, and the use of EV pool cars when officers are travelling on council business.

The Council was also highly commended in the landlord of the year and commended in the large project of the year categories.

In addition to this the Council has also been shortlisted as a finalist for Best Climate Action in the Association for Public Service Excellence (APSE) Awards 2023.

Electric Vehicle Infrastructure Strategy

The Electric Vehicle Infrastructure Strategy was approved by the Council in November 2022.

The Council's role in delivering the strategy is that of an enabler working alongside other partners to increase the coverage of public chargepoints across the Borough in an equitable way, that encourages the transition away from fossil fuel vehicles.

The immediate priorities are to install chargepoints in selected Tewkesbury & Winchcombe car parks and support Gloucestershire County Council's On-street EV chargepoints programme.

Carbon Reduction Programme Year 3 Performance Against Objectives

	Objective	End of Year 3 Progress (2022/2023)
-	**Communications & Engagement**	
1	**Improve CN2030 Branding and web presence.**	Climate change web pages are live on external council website with link from homepage and includes links to Carbon Reporting, CN 2030 Programme and Electric Vehicle Strategy links. Carbon Literate Organisation Bronze Logo displayed on homepage and a CN2030 logo created.
2	**Staff Training – carbon literacy**	Carbon Literacy Training Programme delivered with APSE provided 4 Staff Courses to date, with 61 staff participating. Bronze organisational certificate from Carbon Literacy Organisation achieved.
3	**Climate Change (Service) Champions**	Green Champion Network established with 12 members recruited following Carbon Literacy training. Meeting monthly since January
4	**Further Low Carbon & Sustainability Support for Staff**	EV Salary Sacrifice Scheme launched this year with 2 members of staff participating so far and 1 person registered on the Cycle Scheme. Staff Intranet pages improved to include car sharing database, staff marketplace with "freecycle" type opportunity. Energy saving training offered to frontline staff to provide energy advice.
5	**Publicise, Celebrate and seek recognition for solar canopy and other CN2030 achievements.**	Received Bronze Carbon Literacy Organisation Status (March 2023) Energy Efficiency Association Southwest Regional Awards – Winner Local Authority of the Year, Highly Commended – Landlord and Commended Large Project (Solar Canopy) Large amount of interest and positive coverage of the Solar Canopy on social media. 16,000 views of Drone footage on Twitter. Hosted 6 visits including Climate Leadership Gloucestershire and from other bordering councils, plus many email / telephone enquiries.
-	**Technical Implementation**	
6	**Public Service Centre Low carbon heating**	Resubmitted application for air source heating at the Public Service Centre (October 2022) and successfully awarded £708,000 Salix funding (March 2023) Install scheduled for 2023/24 subject to successful tender award.
7	**Ensure Solar Arrays are fully optimised.**	Monthly Solar Monitoring reports produced.
8	**Further PSC Energy Efficiency improvements.**	Ongoing improvements

9	**Installation and utilisation of Electric Vehicle Charge Points**	Electric Vehicle Strategy approved by Council (November 2022) Supporting Gloucestershire County Councils On-Street Charging Programme. Engaged with the Energy Saving Trust to understand the Council's charging needs. Preparing Tender Documents for installation of chargepoints in public car parks.
10	**Conversion of remaining car fleet to electric**	To carry forward into year 4
11	**Agree Action Plans & Commencement of Domestic property decarbonisation.**	Decarbonisation Plan agreed for a range of measures (insulation, lighting, heating) installed across the property portfolio which ensures all properties are at a level equivalent to EPC rating C or higher. Energy Efficiency Association Southwest 2023 Regional Awards – Highly Commended – Landlord.
12	**Increase internal recycling rates and reduce overall waste.**	Improvements made to how recycling and non-recycling data is captured and measured. Green Champions are helping to support communication messages to improve recycling and waste reduction in the council offices.
-	**Scoping Studies and Policies & Schemes**	
13	**Electric Vehicle Charge Point Strategy**	Electric Vehicle Infrastructure Strategy approved by Council (November 2022) and published on the council website.
14	**Detailed feasibility studies in support of Roses Theatre decarbonisation plans (as applicable)**	Initial discussions held with the Roses Theatre and the Southwest Net Zero Hub which has led to an application submitted (April 2023) to the Salix Low Carbon Skills Fund to fund a detailed heat decarbonisation study and heating design
15	**Commence planning and scoping study for Borough wide decarbonisation.**	Expanded Climate Change Emergency declared by the Council (May 2023). Some work being undertaken such as Electric vehicle chargepoints, improvements on the high street through the High Street Heritage Action Zone (i.e., energy efficiency buildings, communal drinking water fountain, plastic free initiatives).
16	**Develop Waste Collection Vehicle - Low Emission and Alternative Fuel Strategy**	Waste Collection Vehicle, Carbon Reduction Options Report produced as part of the replacement vehicle fleet procurement process, which is due to be implemented in 2023 / 24
-	**Budgets, External Funding & Reporting**	

17	**Research and applications to wider funding streams (as applicable/available)** .	Successful PSDS3B Funding air source heating application submitted October 2022, awarded £708,000 March 2023. Partnership working with Gloucestershire Council has accessed around 500 trees & hedge plants for Winter 2022/23 planting season. Application for funding for detailed low carbon heating feasibility study submitted to Salix for the Roses (April 2023) – currently being at assessment stage. Funding received through the UK Shared Prosperity Funding to support EV infrastructure and for Household energy efficiency support. Energy Saving Trust providing ongoing free support around electric vehicle infrastructure. Southwest Net Zero Hub free support around energy efficiency opportunities.
18	**Maintain and Improve Carbon Reporting** Continuous Reporting.	Carbon Reporting 2023 includes: Working from home emissions More comprehensive office waste data Waste Collection Vehicle Fuel information used, rather than mileage to provide more accurate analysis.
	Partnerships & Wider Activity	
19	**Actively support partnerships such as the Innovate to Renovate Programme and create links with areas such as Climate Change Adaption and Low Carbon Business advice.**	Supporting the county wide innovate to renovate programme with officer time and funding. This includes a retrofit website and zero carbon pathway portal. Ad-hoc low carbon advice provided to external customers such as businesses and householders. Advice also provided to colleagues around funding, training opportunities, carbon foot printing and contributing to council reports. Developing a low carbon communities programme alongside Stroud District Council to support and advice 50 households on energy efficiency retrofit.
20	**Support Tree Planting, Tree Protection and Biodiversity**	Partnership working with Gloucestershire Council has accessed around 500 trees & hedge plants for Winter 2022/23 planting season and maintenance programme agreed to ensure their health.

PART 3 Year 4 Action Plan

August 2023 – July 2024, will be the fourth year of the Council journey to becoming carbon neutral., since establishing the baseline in 2020, and it is another opportunity to review and refresh our objectives for the year ahead, building on the progress and experiences to date.

With the Solar Canopy in place and the installation of the air source heating project planned for later in the year, these will be major steps in making the public service centre building carbon neutral which is fundamental to the Council's Climate Emergency declaration in 2019.

And indeed, ensuring that the air source heating installation, which will significantly reduce reliance on fossil fuels, is delivered successfully, will be a key element of Year 4. At the same time, it is importance to recognise that this single activity will occupy much staff time.

The Council's ongoing commitment to tackling climate change has been re-enforced by extending this declaration (May 2023) to tackling carbon emissions across the whole borough of Tewkesbury and doing all in its power to support carbon neutral aspirations by 2030, hand in hand with nature (ecology).

In the year ahead the Council will need to consider how to maximise its resources to meet this commitment, financially and in staffing. This will lead onto the development of a robust strategy and roadmap to help the council do all in its power to enable a transition towards carbon neutrality across the Borough.

Some examples of the measures that will be needed are already embedded within the Year 4 plan, including the installation of electric vehicle chargepoints as part of the transport hierarchy which addresses the 24% of overall UK greenhouse gas emissions linked to transport (Department for Transport - Transport & Environment Statistics 2022). But the strategy will need to go further encouraging active travel and public transport.

Working closely with Gloucestershire County Council, the Council will be planting more trees and supporting wildlife and biodiversity projects and collaborating with the Local Nature Partnership. We will also be involved in a partnership with Stroud District Council to help residents make energy efficiency retrofit improvement in their own properties.

The Council also has ambition to reduce the carbon footprint on its wider estate such as at the Roses Theatre and Tewkesbury Leisure Centre in addition to ongoing improvements in the Public Service Centre and the council's own domestic properties.

All staff at the council have a role to play in tackling climate change through their work and the Council will continue to invest in Carbon Literacy training and implement complementary organisational improvements in line with the recommendations from the countywide strategic partnership - Climate Leadership Gloucestershire. The Council will indeed continue to work with partners in Climate Leadership Gloucestershire to adopt good practice and show leadership.

In conclusion, there has been robust and tangible progress made since August 2020 when the Council started on its Carbon Neutral journey, and as a result of this the opportunities to push both ourselves, our partners and our residents further and harder are presenting themselves. We are committed to doing all we can to achieve positive change on this crucial agenda in the short, medium and long term.

The table overleaf summarises Year 4 planned activity:

Carbon Reduction Programme Objectives

Year 4 (September 2023 – August 2024)

Member with Responsibility: Cllr Sarah Hands, Lead Member for Clean and Green

Officer with Responsibility: Simon Dix, Executive Director: Resources

	Action	Success Criteria	Timetable
-	**Communications & Engagement**		
1	**Continue Carbon Literacy Training**	2 Staff Courses Undertaken & 1 Course for Members. Follow up support provided. Progress towards Silver organisational accreditation.	31st March 2024
2	**Green Champions Network delivering savings across the Council**	Green Champions reporting carbon saving across range of activities from service area	30th June 2024
3	**Internal Behavioural Change - Implementation of Climate Leadership Gloucestershire Action Plan**	Implement a range of internal behavioural change activities at Tewkesbury Borough Council, embedding climate change and ecological enhancement within council activities and policies.	31st March 2024
-	**Technical Implementation**		
4	**Air Source Heating Implementation**	Successful tender exercise and installation of Air Source Heating in the Public Service Centre	31st March 2024
5	**Procurement of Waste Collection Fleet Vehicles**	Implementation of Low Carbon Vehicle Procurement Strategy where budget allows	30th June 2024

6	**Electric Vehicle (EV) charge points in Car Parks (and implementation of EV strategy)**	Successful tender exercise and installation of Electric Vehicle Chargepoints in Public Car Parks - Phase 1	30th June 2024
7	**Energy Efficiency Improvements on the Council's Estate**	Further Energy Reduction Measures initiated across Council Buildings including the public service centre, the Roses Theatre and the Leisure Centre.	30th June 2024
8	**Continue the conversion of Council Pool vehicles to electric**	Increase the proportion of pool vehicles which are electric and increase usage.	30th June 2024
-	**Scoping Studies, Policies & Schemes**		
9	**Investigate Carbon Impact of the Councils Use of Information Technology**	Review of current use and develop strategy to minimise impact of IT services including equipment, software, applications and website.	30th March 2024
10	**Development & Implementation of Planning Strategies to support carbon neutral ambitions**	Policy Development in this area and improved officer understanding of legislation (such as Biodiversity Net Gain).	30th March 2024
11	**Detailed feasibility studies in support of Roses Theatre & Leisure Centre decarbonisation plans (as applicable)**	Submit applications for funding for decarbonisation of Roses & Leisure Centre, as and when opportunities arise.	30th June 2024
12	**UKSPF Community Centre Grants (focussing on energy efficiency) launched**	Awards granted to community organisations for energy efficiency activities utilising UK shared prosperity funding.	30th December 2023

-	**Budgets, External Funding & Reporting**		
13	**Research and applications to wider funding streams**	External funding opportunities identified and secured.	30th June 2024
14	**Secure Additional Resources for Wider Climate Change Declaration**	Budget approved	30th September 2023
15	**Recruit Climate Change Officer**	Climate Change Officer recruited and in post enabling more focus on ecology and biodiversity.	29th February 2024
16	**Develop Strategy to deliver Wider Climate Change Declaration**	Contract for strategy commissioned.	30th June 2024
17	**Continued improvement to carbon reporting methodology**	Confidence in accuracy of calculation and inclusion within 2023 reporting. For example, understand the reduced emissions from staff commuting for incorporation into our data analysis.	30th June 2024
	Partnerships & Wider Activity		
18	**Trees & Biodiversity**	Continue to plant trees (minimum 100) and other biodiversity, ensuring they are maintained in health. Support the implementation of Biodiversity Net Gain Legislation and update the Tree Safety Management Policy to include a Tree Strategy to protect and enhance tree coverage.	29th February 2024
19	**Low Carbon Communities Project & Retrofit Centre Partnership**	Successful delivery of low carbon communities project which will provide bespoke energy efficiency advice to up to 50 households and also supporting county wide partnership work to reach a wider audience.	30th June 2024
20	**Support Gloucestershire Waste Partnership's Waste Reduction and Recycling awareness campaigns.**	Officer and Communications support for key waste reduction and recycling campaigns. Reducing the amount of waste disposed of at Javelin Park by adopting approaches set out in the Gloucestershire Resources and Waste Strategy 2022-25	30th June 2024