



Assessment Period: 1st April 2019 - 31st March 2020

Carbon Footprint Ltd, Belvedere House, Basing View, Basingstoke, RG21 4HG, UK | +44 (0)1256 592 599 info@carbonfootprint.com | www.carbonfootprint.com



Executive Summary

Carbon Footprint Ltd has assessed the greenhouse gas (GHG) emissions of Salisbury City Council from 1st April 2019 to 31st March 2020 based on a dataset provided by the company.

Current Performance

- Salisbury City Council's total footprint is 457.93 tCO₂e.
- Site utilities (gas and electricity) account for a combined 86.4% of the total carbon footprint.

Recommendations

- Conduct energy audits at the Crematorium and Guildhall as these are the most energy intensive sites.
- Improve data consolidation and accuracy for the purposes of reporting by creating a site portfolio log (see Section 5.1.2 for further details).
- Report market-based emissions in future to reflect the positive impact of purchasing electricity through zero/low carbon energy tariffs.
- Develop a carbon reduction action plan and set reduction targets based on activity data (e.g. kWh) and carbon intensity metrics (e.g. emissions per employee and/or per £M turnover).



^{* &}quot;Other" constitutes water (and wastewater), waste, van travel, grey fleet, paper and taxi travel.

| | Baseline Year (2019/20) |
|---|-------------------------|
| Total Gross GHG Emissions (tonnes CO ₂ e) | 457.93 |
| Tonnes of CO₂e per employee | 7.16 |
| Tonnes of CO ₂ e per £M turnover | 97.08 |
| Tonnes of CO ₂ e per thousand residents | 11.36 |
| Total Net GHG Emissions (tonnes of CO ₂ e) | 192.30 |



This is the first time that Salisbury City Council has assessed its GHG emissions, therefore this will be used as the baseline for comparison going forward. The table above outlines the results of the baseline year assessment. Please note that a total net tonne of CO₂e has been provided alongside the gross total. Salisbury City Council were able to provide evidence that their gas at the crematorium is supplied by Brook Green. As Brook Green offset their customers' gas supply¹, this has been deducted from the gross total.

Following the declaration of a Climate Change Emergency at Full Council on 17th June 2019, Salisbury City Council has a target to become Carbon Neutral by 2030. We thoroughly promote reduction in emissions at their source, however as this often takes time to enact and can be a slow process, we encourage the use of carbon offsetting concurrent to reduction activities in order to compensate for the emissions already generated. Carbon offsetting enables the funding of an equivalent CO₂e saving elsewhere, as well as allowing Salisbury City Council to achieve our Carbon Neutral standard. This will allow Salisbury City Council to showcase its commitment to sustainability and the positive steps it's taking during the Climate Change Emergency.



¹ Source: <u>www.brookgreensupply.com/supply</u>



Table of Contents

| Exe | cutive Summary | I |
|-----|--|-----|
| 1. | Introduction | 1 |
| 2. | Calculation Scope and Accuracy | 5 |
| 3. | Carbon Footprint Results | 7 |
| 4. | Comparison and Benchmarking | .14 |
| 5. | Key Recommendations | .15 |
| 6. | References | .22 |
| A. | Annex A – Calculation Methodology (Additional Notes) | .23 |
| В. | Annex B – Supplied Data and Emissions Breakdown | .24 |

Quality Control

| Report issue number: | 1.0 |
|----------------------------|-------------------|
| Date: | 23 December 2020 |
| | |
| Calculations completed by: | Zoe Booth |
| Calculations reviewed by: | Georgina Whitlock |
| | |
| Report produced by: | Zoe Booth |
| Report reviewed by: | Georgina Whitlock |
| | |
| Director approval: | John Buckley |



1. Introduction

1.1. Overview

Salisbury City Council was established in April 2009 following local government reorganisation and is based at The Guildhall in Salisbury's historic Market Place. The Council has 23 elected Councillors and is responsible for a variety of services including allotments, Avenue Cemetery, Bemerton Heath Centre, camping & caravan sites, car parks, parks and open spaces, public toilets and community development.

1.2. Salisbury City Council's carbon management journey

Carbon Footprint provides a simple six step annual journey to enhance your sustainability credentials whilst complying to best practice and differentiating your brand. Salisbury City Council has completed the first step of its annual carbon management journey.



The purpose of this report is to:

- Summarise the results of the carbon footprint assessment.
- Provide advice on carbon reduction targets.
- Provide practical recommendations to enhance your sustainability programme and reduce your emissions.

1.3. What is a carbon footprint?

A carbon footprint is a measure of the impact our activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide equivalents (CO₂e). A carbon footprint is made up of two parts, direct and indirect emissions.

1. Direct emissions:

Direct emissions are produced by sources which are owned or controlled by the reporting organisation and include electricity use, burning oil or gas for heating, and fuel consumption as a result of business travel or distribution. Direct emissions correspond to elements within scopes 1, 2 and 3 of the World Resources Institute GHG Protocol, as indicated in Table 1.

| Footprint | nt Activity | |
|-----------|--|---|
| Direct | Electricity, heat or steam generated on-site | 1 |
| | Natural gas, gas oil, LPG or coal use attributable to company-owned facilities | 1 |
| | Company owned vehicle travel | 1 |
| | Production of any of the six GHGs (CO_2 , CH_4 , N_2O , HFCs, PFCs and SF_6) | 1 |
| | Consumption of purchased electricity, heat steam and cooling | 2 |
| | Employee business travel (using transport not owned by the company) | 3 |

Table 1: Direct emissions sources



2. Indirect emissions:

Indirect emissions result from a company's upstream and downstream activities. These are typically from outsourced/contract manufacturing, and products and the services offered by the organisation. Indirect emissions correspond to scope 3 of the World Resources Institute GHG Protocol excluding employee business travel as indicated in Table 2.

| Table 2: Indirect | emissions sources |
|-------------------|-------------------|
|-------------------|-------------------|

| Footprint | Activity | Scope |
|-----------|---|-------|
| | Employee commuting | 3 |
| | Transportation of an organisation's products, materials or waste by another | 2 |
| | organisation | J |
| | Outsourced activities, contract manufacturing and franchises | 3 |
| | GHG emissions from waste generated by the organisation but managed by | 2 |
| | another organisation | |
| Indiract | GHG emissions from the use and end-of-life phases of the organisation's | 2 |
| munect | products and services | J |
| | GHG emissions arising from the production and distribution of energy | |
| | products, other than electricity, steam and heat, consumed by the | 3 |
| | organisation | |
| | GHG emissions from the production of purchased raw or primary materials | 3 |
| | GHG emissions arising from the transmission and distribution of purchased | 2 |
| | electricity | 3 |

For businesses, the assessment focuses on direct emissions, as these lie under the control of the organisation. However, we ask companies to recognise that there is an indirect emissions footprint and select suppliers based on their environmental credentials alongside price and performance.

1.4. Why is it important?

Climate change is a global threat which will impact the lives of everyone on the planet.

Over the past two decades the effects of climate change have accelerated. Considerable evidence exists proving climate change has been exacerbated by human activity. Changes in our post-industrial lifestyles have altered the chemical composition of the atmosphere, generating a build-up of greenhouse gases – primarily carbon dioxide, methane, and nitrous oxide levels – raising the average global temperature.

The consequences are already evident and will continue to worsen unless significant action is taken and quickly. Sea level will continue to rise and local climate conditions to be altered, causing an increase in extreme weather events, affecting forests, crop yields, and water supplies. This can lead to homelessness, famine and conflict as resources become scarcer.

Environmental pollution and climate change affect human health, accelerate species extinction, and disrupt vital ecosystems. **Ambient (outdoor) air pollution is responsible for at least 4 million human deaths each year**². In addition to this, poor air quality and issues of clean water availability leave us

² World Health Organisation. <u>https://www.who.int/health-topics/air-pollution</u>



more susceptible to diseases such as COVID-19. Combined with rises in temperature and deforestation (from direct human action and climate change related events), resulting in the displacement of animals from their native habitats, the frequency of disease occurrence will increase, as disease will transfer from animals to other geographical areas and larger human populations.

It is vital that all individuals, businesses, organisations and governments work towards the common goal of reducing greenhouse gas emissions. This carbon footprint assessment will enable Salisbury City Council to begin doing its bit by monitoring, reducing and offsetting its emissions.

1.5. ISO 14064-1:2018

This GHG report has been prepared in accordance with Part 1 of ISO 14064: 2018. The GHG inventory, report, or statement has not been verified.

This standard requires the estimation of likely error margin based on a simple error analysis, to identify uncertainty in the calculations. Our simple error analysis provides a level of uncertainty based on the accuracy of the data provided. This shows the error for each emissions source, as well as the sum of these divided by the total emissions, to produce a total percentage error.

1.6. Calculation methodology

The carbon footprint appraisal is derived from a combination of client data collection and data computation by Carbon Footprint's analysts.

Carbon Footprint's analysts have calculated Salisbury City Council's footprint using the 2019 conversion factors developed by the UK Department for Environment, Food and Rural Affairs (Defra) and the Department for Business, Energy & Industrial Strategy (BEIS). These factors are multiplied with the company's GHG activity data. Carbon Footprint has selected this preferred method of calculation as a government recognised approach and uses data which is realistically available from the client, particularly when direct monitoring is either unavailable or prohibitively expensive.

Additional methodology information is presented in Annex A.

1.7. Data supplied for the carbon footprint appraisal

A summary of the data supplied by Salisbury City Council for the appraisal is presented in Annex B.



1.8. Abbreviations

| A/C | Air Conditioning |
|-------------------|--|
| BEIS | Department for Business Energy & Industrial Strategy |
| CO ₂ | Carbon Dioxide |
| CO ₂ e | Carbon Dioxide Equivalent |
| Defra | Department for Environment, Food and Rural Affairs |
| EU | European Union |
| EV | Electric Vehicle |
| GHG | Greenhouse Gas |
| IPCC | Intergovernmental Panel on Climate Change |
| ISO | International Standards Organisation |
| km | Kilometres |
| kWh | Kilowatt Hours |
| PHEV | Plug-in Hybrid Electric Vehicle |
| PR | Public Relations |
| UN | United Nations |
| | |



2. Calculation Scope and Accuracy

2.1. Scope of this work

Carbon Footprint has assessed the GHG emissions from 1st April 2019 to 31st March 2020 resulting from the energy consumption at Salisbury City Council's facilities and its business transport activities. This report will set the base year for all further reporting emissions to be compared against.

2.2. Organisational & reporting boundaries

The organisation has accounted for all quantified GHG emissions and/or removals from facilities over which it has operational control. The assessment covers the following reporting boundaries:



Waste disposal, other than waste produced at Council sites, (e.g. residential waste) has been excluded from the scope of the assessment as the waste facilities are an outsourced service. Leisure facilities, sheltered housing, and schools have also been excluded from the scope for this assessment as they are not under the operational control of Salisbury City Council. Indirect GHG sources that are outside the assessment boundary have been excluded from quantification as it is not technically feasible or cost effective, to include these in the GHG assessment.



2.3. Calculation accuracy & materiality

The result of a carbon footprint calculation varies in accuracy depending on the data set provided. The more accurate the data supplied, the more accurate the final result which will subsequently allow for better targeting of areas where improvements can be made. Materiality is determined by the percentage contribution of each element to the overall footprint.

The data provided is derived from energy bills, expenses claims and data collected by Salisbury City Council (Table 3). Based on the accuracy of the data provided, a simple error analysis has been used to estimate the error margin for the appraisal results. **To improve accuracy for future assessments, please see recommendations provided in Section 5.**

| Dataset | Source of data and comments | Accuracy | Materiality | Estimated Error (%) | Estimated Error Margin (tCO ₂ e) |
|--|--|--------------|-------------------|------------------------|--|
| Site gas | Energy consumption (kWh) provided from meter readings and utility bills. | Good | High (>50%) | 10% | 30.74 |
| Site electricity | Energy consumption (kWh) provided from meter readings and utility bills. | Good | Medium (5-20%) | 10% | 8.86 |
| Vehicle fuel usage | Litres of fuel used for grounds maintenance (e.g. mowers, strimmers and tractors) were provided based on purchase records from fuel cards. | Excellent | Low (1-5%) | 1% | 0.20 |
| Refrigeration & A/C | Records of refrigerant top ups provided by the Council's servicing provider (New Air). | Excellent | Low (1-5%) | 1% | 0.17 |
| Water (and wastewater) | Water data was provided as a cost. Wessex Water charges for 2019 were then used to estimate the supply and wastewater. | Average | Low (1-5%) | 50% | 7.40 |
| Waste | Tonnes of waste produced (split by waste stream) provided by waste collection company. Disposal routes also provided by the waste collection company. | Excellent | Very Low (<1%) | 1% | 0.03 |
| Van travel | Accurate annual mileage and fuel type provided per vehicle in an MS Excel spreadsheet from fuel card data. | Excellent | Very Low (<1%) | 1% | 0.03 |
| Employee- owned car travel (grey fleet) | Annual mileage provided based on expense claim records. Average unknown fuel type was used due to a lack of information on fuel type. | Very Good | Very Low (<1%) | 5% | 0.14 |
| Paper | Amount of paper used within the data period was given based on purchase records. A 95% A4 vs 5% A3 split was estimated by Salisbury City Council. | Very Good | Very Low (<1%) | 5% | 0.06 |
| Taxi travel | Cost provided from expense claim records. | Good | Very Low (<1%) | 10% | <0.01 |
| Total | | | | +/- 10.4% | +/- 47.63 |

Table 3: Assessment accuracy, materiality and simple error analysis



3. Carbon Footprint Results 3.1. Summary of results

The total carbon footprint for Salisbury City Council for the period ending 31st March 2020 was 457.93 tonnes CO₂e. Table 4 provides a summary of results for Salisbury City Council's carbon footprint calculation by scope and source activity.

| Scope | Activity | Tonnes CO ₂ e | |
|-----------|--|--------------------------|--|
| | Site gas | 307.44 | |
| Scope 1 | Vehicle fuel usage | 19.80 | |
| Scope 1 | Refrigeration & A/C | 17.23 | |
| | Van travel and distribution | 2.93 | |
| Scope 1 S | Sub Total | 347.39 | |
| Scope 2 | Electricity generation 81.66 | | |
| Scope 2 S | Sub total | 81.66 | |
| | Water (and wastewater) | 14.80 | |
| | Electricity transmission & distribution | 6.93 | |
| Scope 3 | Waste | 3.27 | |
| | Employee-owned car travel (grey fleet) | 2.76 | |
| | Paper | 1.11 | |
| | Taxi travel | 0.004 | |
| Scope 3 S | Sub Total | 28.88 | |
| Overall G | iross Total | 457.93 | |
| Tonnes o | f CO₂e per employee | 7.16 | |
| Tonnes o | f CO₂e per £M turnover | 97.08 | |
| Tonnes o | Tonnes of CO ₂ e per thousand residents 11.36 | | |
| Overall N | let Total* | 192.30 | |

Table 4: Results of Salisbury City Council's carbon footprint assessment by scope and source activity

*Please note that a total net tonne of CO₂e has been provided alongside the gross total. Salisbury City Council were able to provide evidence that its gas at the crematorium is supplied by Brook Green. As Brook Green offset their customers' gas supply³, this has been removed from the gross total.

Figures 2 and 3 show the breakdown of the total GHG emissions produced by Salisbury City Council. It can be seen that site utilities (gas and electricity) are the largest contributors at a combined 86.4%. Gas consumption accounts for the largest proportion of this, at 67.1% of the total footprint. Vehicle fuel and refrigerant top up from A/C account for less than 5% each of the total footprint; whilst "Other" accounts for 5.4%. "Other" constitutes water (and wastewater), waste, van travel, grey fleet, paper and taxi travel.

³ Source: <u>www.brookgreensupply.com/supply</u>





Figure 2: Contribution in tonnes of CO₂e of each element of Salisbury City Council's carbon footprint



Figure 3: Percentage contribution of each element of Salisbury City Council's carbon footprint



3.2. Emissions from energy usage at site facilities

Salisbury City Council has approximately 25 sites consuming energy. Table 5 shows the emissions from on-site energy use at each of Salisbury City Council's sites. The top ten sites for consumption have been highlighted. Based on the data provided, only 8 sites utilise gas. Despite this, gas accounts for 77.6% of GHG emissions associated with site energy use (Figure 4). No other fuel types are used for site energy.

The Crematorium is the greatest contributor to site energy consumption (104,811 kWh electricity; 1,285,197 kWh gas). However, the Crematorium gas is supplied by Brook Green who offset their customers gas supply⁴. As a result, this total can be deducted from the gross total GHG emissions, making the net emissions for the Crematorium 0.00 tCO₂e. This also makes the net total carbon footprint 192.30 tCO₂e.

The Guildhall is the next highest consuming site, accounting for 13.41% of on-site energy emissions in terms of tCO₂e (27.62% of the net total on-site energy emissions). The amenity block (Hudson Field) produces the next highest at 18.10 tCO₂e; with all remaining sites producing less than 10 tCO₂e each. It should be noted that annual electricity consumption for street lighting was estimated based on an annual estimated consumption (EAC) figure sourced from an unmetered supply certificate for festive lighting. This figure is likely to provide an overestimate than an underestimate due to increased lighting during the festive period.

| Site Name | Electricity | Natural | Total Emissions |
|---|----------------------|--------------------------|-----------------|
| | (tCO ₂ e) | Gas (tCO ₂ e) | (tCO2e) |
| Salisbury Crematorium, London Road, Salisbury, SP1 3JB | 29.06 | 236.28 | 265.35 |
| The Guildhall, Market Place, Salisbury, SP2 8NW | 20.99 | 32.13 | 53.12 |
| Amenity Block, Hudson Field, Salisbury DC Castle Road, | | 19 10 | 19 10 |
| Salisbury, SP1 3SA | - | 18.10 | 18.10 |
| The Market Stalls, Guildhall Square, Salisbury, SP1 1JH | 7.62 | - | 7.62 |
| Festive lighting/ estimate for street lighting | 6.79 | - | 6.79 |
| 60 Pinewood Way, Salisbury, SP2 9HU | 2.08 | 4.36 | 6.44 |
| Guidhall market square pillars | 0.28 | 5.62 | 5.90 |
| Victoria Park Stratford Road, Salisbury, Wiltshire, SP1 3JJ | - | 5.62 | 5.62 |
| Pavilion, The Portway, Stratford Sub Castle, Salisbury, SP1 3LD | 1.88 | 3.60 | 5.48 |
| 58a Pinewood Way, Salisbury, SP2 9HU | 3.11 | - | 3.11 |
| Unit 12 Netherhampton Road, Harnham Trading Est, Salisbury, | 2.70 | - | 2.70 |
| 114 Carmelite Way, Salisbury, SP1 2HW | 0.92 | 1 72 | 2 64 |
| Charts Davilian Harnham Dead Salishury, SD2 81C | 2.62 | 1.72 | 2.01 |
| sports Pavilion, Harnnam Road, Salisbury, SP2 8JG | 2.63 | - | 2.03 |
| Pavilion, Stratford Road, Salisbury, SP1 3JH | 2.29 | - | 2.29 |
| Hudsons Field, Castle Road, Salisbury, SP1 3RR | 2.01 | - | 2.01 |
| 58 Pinewood Way, Salisbury, SP2 9HU | 1.30 | - | 1.30 |

Table 5: CO₂e emissions as a result of site energy consumption

⁴ Brook Green Energy Supply <u>https://www.brookgreensupply.com/supply</u>



| Site Name | Electricity | Natural Gas (tCO2e) | Total Emissions |
|--|-------------|------------------------|-----------------|
| Plot 1 (Dxz469a01), Queen Street, Guildhall Square, Salisbury, SP1 1JH | | - | 1.15 |
| Toilets & Kitchen, Victoria Park, Castle Road, Salisbury, SP1 3SA | 1.02 | - | 1.02 |
| Lush Car Park, Crane Bridge Road, Salisbury, SP2 7TD | 0.85 | - | 0.85 |
| Toilet Block, Chhcl Gdn, Southampton Road, Salisbury, SP1 2LE | 0.66 | - | 0.66 |
| Unit 36 Netherhampton Road, Harnham Trading Est, Salisbury, SP2 8NW | 0.35 | - | 0.35 |
| 18 College Street, Salisbury, SP1 3AL | 0.32 | - | 0.32 |
| Public Conveniences, Lower Road, Salisbury, SP2 9NW | 0.27 | - | 0.27 |
| Gardeners Ascn Bld, Westminster Road, Salisbury, SP2 7DG | 0.23 | - | 0.23 |
| Public Toilets, Fisherton Recreation Ground, Westminster Road, Salisbury, SP2 7DG | 0.08 | - | 0.08 |
| Total | 88.60 | 307.44 | 396.03 |



Figure 4: CO₂e emissions per energy type basis



3.3. Emissions from refrigerants

GHG emissions associated with refrigerants and A/C at Salisbury City Council account for 3.8% of the total footprint with a total of 17.23 tCO₂e (Table 6).

| CFP Data ID | Location | Amount Refilled | Refrigerant | GWP | Emissions |
|-------------|----------------|-----------------|-------------|-----------------------|----------------------|
| | | (Kg) | type | (RgCO ₂ e) | (ico ₂ e) |
| Q002 | Guildhall | 3.7 | R410A | 2088.00 | 7.73 |
| Q001 | Guildhall | 2.5 | R410A | 2088.00 | 5.22 |
| Q007 | Guildhall | 1.4 | R410A | 2088.00 | 2.92 |
| Q008 | Bemerton Heath | 0.65 | R410A | 2088.00 | 1.36 |
| Grand Total | | 8.25 | | | 17.23 |

Table 6: CO₂e emissions as a result of on-site refrigerant gas replenishment

3.4. Emissions from business travel

Figure 5 and Table 7 show the GHG emissions resulting from business travel and vehicle/equipment fuel. Vehicle fuel usage is the largest contributor at 77.7% of the total transport footprint. This encompasses petrol used for grounds maintenance equipment including mowers and strimmers, as well as gas oil used in tractors. GHG emissions associated with fuel use in Salisbury City Council's van fleet is of a similar weighting to that of the mileage claimed on employee-owned car travel at 11.5% and 10.8%, respectively. The detailed results are given in Annex B.



Figure 5: Percentage contribution of each element to transportation emissions

Table 7: CO₂e emissions due to transportation

| Type of Travel / Transport | Tonnes of CO ₂ e | | | |
|--|-----------------------------|--|--|--|
| Vehicle fuel usage | 19.80 | | | |
| Van travel and distribution | 2.93 | | | |
| Employee-owned car travel (grey fleet) | 2.76 | | | |
| Taxi travel | 0.004 | | | |
| Total | 25.49 | | | |



3.5. Emissions from water and wastewater

Salisbury City Council provided the total spend (£) for its water supply and treatment for all sites throughout the data period based on bills from its supplier, Wessex Water. Standing charges were deducted from the total cost and fixed charges of £2.22 (water supply) and £1.88 (sewerage) per cubic metre of water were used to calculate total consumption based on Wessex Water's 2019 volumetric charges⁵.

Table 8 shows the calculated consumption (m³), along with GHG emissions associated with both supply and wastewater. Sites with water supply have been split into four key categories based on site type. Allotments have the highest water consumption, with Salisbury City Council's main buildings and public conveniences having a very similar level of consumption. Market stalls and pillars use a comparatively low quantity of water which is to be expected as they are only in use for a few hours per week, unlike the other sites with water supply.

| Site | Water supply (m ³) | Total emissions from water consumption ⁶ (tCO ₂ e) |
|---------------------------|-----------------------------------|---|
| Allotments | 5 <i>,</i> 350 | 5.68 |
| Main sites | 4,384 | 4.66 |
| Public conveniences | 4,173 | 4.43 |
| Market stalls and pillars | 22 | 0.02 |
| Total | 13,930 | 14.80 |

Table 8: CO₂e emissions due to water and wastewater

Salisbury City Council's calculated water use equates to 211 m³ per employee⁷.

3.6. Emissions from waste

Table 9 provides a breakdown of the waste produced by Salisbury City Council and the associated emissions. In terms of waste production, Salisbury City Council produce 2.66 tonnes per employee.

| Type of waste | Waste produced per year (tonnes) | Total emissions (tCO ₂ e) |
|---------------|-------------------------------------|--------------------------------------|
| Residual | 126.00 | 2.69 |
| Recyclable | 5.67 | 0.12 |
| Green | 44.06 | 0.45 |
| Hazardous | 0.02 | 0.002 |
| Grand Total | 175.75 | 3.27 |

Table 9: CO₂e emissions due to waste production

⁵ <u>https://www.wessexwater.co.uk/your-account/your-bill/our-charges</u>

⁶ This includes emissions from both supply and wastewater treatment

⁷ Based on total water consumption and total number of employees



3.7. Emissions from paper

Salisbury City Council has provided data regarding the number sheets of paper used based on a monthly printer report. An assumption of 95% A4 and 5% A3 paper has been used as this data was not available. The quantity of paper and the associated GHG emissions can be seen in Table 10.

In terms of kg of paper used (not tCO₂e), Salisbury City Council use an average of 17.66 kg per employee.

| Paper type | Number of sheets | Weight (kg) | Total Emissions (tCO ₂ e) |
|-------------|------------------|-------------|---|
| Virgin – A4 | 211,432 | 1,054.96 | 1.005 |
| Virgin – A3 | 11,128 | 111.05 | 0.105 |
| Total | 222,560 | 1,166.01 | 1.11 |

Table 10: CO₂e emissions due to paper consumption



4. Comparison and Benchmarking 4.1. Comparison to base year emissions

This is the first carbon footprint assessment Salisbury City Council has carried out and, therefore, it will serve as a base year for future carbon footprint assessments.

Table 11 below show emissions per activity, as well as Salisbury City Council's total carbon footprint and carbon intensity metrics (tonnes of CO_2e per employee, tonnes of CO_2e per £M turnover, and tonnes of CO_2e per thousand resident).

| Element | 2019/20 |
|--|---------|
| Site gas | 307.44 |
| Site electricity | 88.60 |
| Vehicle fuel usage | 19.80 |
| Refrigeration & A/C | 17.23 |
| Water (and wastewater) | 14.80 |
| Waste | 3.27 |
| Van travel and distribution | 2.93 |
| Employee-owned car travel (grey fleet) | 2.76 |
| Paper | 1.11 |
| Taxi travel | 0.004 |
| Total Tonnes of CO₂e | 457.93 |
| Tonnes of CO ₂ e per employee | 7.16 |
| Tonnes of CO ₂ e per £M turnover | 97.08 |
| Tonnes of CO2e per thousand residents | 11.36 |
| Total Net Tonnes of CO ₂ e ⁸ | 192.30 |

Table 11: Salisbury City Council's carbon footprint comparison and percentage change

Carbon Footprint recommends that organisations use the base-year GHG inventory as a benchmark to measure against. When using the base-year GHG inventory as a benchmark, organisations can set realistic reduction targets and measure their progress year on year. This can also provide excellent marketing opportunities, where real figures can demonstrate your commitment towards helping fight climate change.

⁸ Total Gross tCO₂e minus offsets carried out by Brook Green energy supplier



5. Key Recommendations

The following recommendations are designed to help you build upon the results of the appraisal and your carbon management over the coming year.





Salisbury City Council already has a target in place to become Carbon Neutral by 2030⁹. The Council should continue to assess its emissions annually in order to track its progress of carbon reductions. All targets set should be regularly reviewed and adjusted accordingly (i.e. brought forward/increased if reductions are met ahead of schedule). We recommend a combination of short-term and long-term targets based on absolute and intensity metrics. These can be measured in terms of activity data (e.g. kWh) or emissions.

Carbon Footprint Ltd can provide you with additional support in the development of targets and/or a carbon management plan. Please contact us for further information.

5.1.2. Improving the accuracy of future carbon footprint assessments

Based on the accuracy of the data provided, the estimated overall error margin is +/- 10.4%, equating to $47.63 \text{ tCO}_2\text{e}$. To improve the accuracy of future assessments, we recommend the following:

Data consolidation

Due to the number of sites and the quantity of data required for the assessment, Salisbury City Council should review their current monitoring system to allow them to collate the data more easily in future. Whilst Salisbury City Council do have a current portfolio log, we recommend some adaptations to ensure it contains the following information for each site to further help identify whether there are gaps across the energy and water data:

- Site name
- Site address
- Site ID (to prevent issues faced this year with consolidation of energy and water data)
- Site energy type (i.e. electricity only, electricity and gas, or gas only).

⁹ Salisbury City Council – Climate Change <u>https://www.salisburycitycouncil.gov.uk/your-council/climate-change</u>



- Supplier contract start and end dates this will aid you in dual-reporting using the GHG Protocol methodology in future assessments, should you wish to do so. It will also allow you to ensure that you are on the best contract for your needs and keep on top of renewals.
- Date of reading & kWh consumption

I have provided an example of how this may look below, although this can be further tailored to suit your needs:

| Site Name | Site ID | Address | Utility type | Supplier | Contract start date | Contract end date | Meter ID | Date | Day (kWh) | Night (kWh) | Total (kWh) |
|--------------|------------|---------|-----------------|----------|---------------------------|-------------------------|-------------|------|--------------|----------------|----------------|
| | | | | | | | | Jan | | | |
| | | | | | | | | Feb | | | |
| | | | | | | | | Mar | | | |

We recommend that "Utility Type" is a drop-down menu with options for electricity, gas and water. Recording the information in a way similar to above will allow data to be filtered more easily by site, departments, meters, suppliers and date; allowing trends in data to be more easily spotted. It would also be useful to note whether the figure recorded is a kWh consumption for the period or the meter reading taken – ideally this would be consistent across the board to prevent mis-interpretation.

Electricity & Gas

- Investigate electricity supply for market square pillars. For this assessment, a kWh consumption figure was provided for the month of December only. It should be confirmed whether this is due to seasonal use or whether there is consumption for the 12-month data period for future assessments.
- Consider reporting market-based scope 2 emissions, following GHG Protocol methodology, to reflect the impact of Salisbury City Council's choice to purchase through renewable and lowcarbon energy tariffs in future assessments. Please note the current assessment shows location-based emissions.
- Determine whether Salisbury City Council owns any sheltered housing for which energy should be included within the scope of assessment. Note: this may be a whole building or communal areas in housing such as tenanted flats.
- Further investigate the electricity consumption of street lighting throughout the year.
- Using site IDs (as with the portfolio log) and MPAN/MPRNs should enable Salisbury City Council to more easily track electricity data and could enhance the current system.

Water

- We recommend taking meter readings at the beginning and end of the data period (as a minimum) to collate the most accurate water consumption data.
- The use of Site IDs (as with the portfolio log) and meter numbers will enable Salisbury City Council to better track water consumption data; enhancing the current monitoring system and increasing accuracy within future assessments.



5.2. Reducing emissions To reduce GHG emissions, we recommend the following:

- Investigate the possibility for heat recovery from the Crematorium. If feasible, this could be used for district-style heating for nearby buildings, or used to generate electricity/heating on site.
- Switch to renewable energy tariffs across sites where this is not already in place. A marketbased assessment (as mentioned in section 5.1) will allow a more accurate reflection of these green energy choices.
- Consider carrying out an energy audit at the Crematorium and Guildhall as these are the sites with the highest energy use. This will enable the identification of further opportunities to reduce energy consumption. Energy audits should first focus on reducing energy demand by improving efficiency (e.g. by improving building insulation and equipment) and behaviours, before looking into on-site renewable and low carbon electricity/heat generation technologies.
- Educate and raise awareness of energy issues and efficient technologies/behaviours among staff and the wider community.
- When leasing/purchasing new vehicles, consider transitioning to electric vehicles (EV) or plugin hybrid electric vehicles (PHEV) and installing charging points on-site. Analyse the feasibility of adding EVs to your fleet by comparing average daily required travel distance against realworld driving ranges of EVs.

5.2.1. Setting carbon reduction budgets based on emissions

Having an agreed and defined system for investing in future carbon reduction activities helps drive carbon reduction and cost savings in a business. Many leading organisations are doing this through setting an "Internal Carbon Tax" or an "Internal Carbon Price" within their organisation (see http://www.carbonfootprint.com/internal_carbon_pricing.html for more information).

We suggest starting by setting a price of £20-25 per tonne of CO_2e , as this typically relates to 1-6% of the cost of causing emissions (as shown in the table below). You may wish to collect the "taxation" by each functional group (depending on their emissions), or simply account for this at the top-level company budgeting.

| Emissions Source | Electricity | Natural Gas | Car Miles | Flights | | | |
|--|-------------|-------------|------------|---------|--|--|--|
| 1 tonne CO ₂ e is equivalent to | 2400 kWh | 5500 kWh | 3300 miles | 5200 km | | | |
| Cost to produce 1 tonne CO ₂ e | £335 | £220 | £1485* | £400 | | | |
| £20 carbon price represents | 6% | 9% | 1% | 5% | | | |

Table 12: Carbon price compared to energy and travel costs

*assumes a rate of 45p per mile

We recommend allocating this defined budget to help both internal and external carbon reduction activities. For example, it could be split:



- 75% on internal carbon reduction measures
- 25% on external carbon offsetting activities

Investments in internal carbon reduction activities should be made based on the level of carbon savings and the associated cost savings. Good carbon reduction investments usually pay for themselves and give a return on investment to the business within 3 years. Carbon offsetting return on investment is primarily measured through access to tenders, brand enhancement and PR (use marketing return on investment techniques).

5.2.2. Funding opportunities

Plug-in car & van grants:

This funding is provided in the form of grants issued by the UK Government, which go towards the purchase of a plug-in electric vehicle. The levels of funding are as follows:

- 20% of the cost of a van, up to a maximum of £8,000
- 35% of the cost of a car, up to a maximum of £3,000

This will help to reduce the company's vehicle travel emissions. Further details on which vehicles are eligible are available through this website - <u>https://www.gov.uk/plug-in-car-van-grants</u>

Workplace Charging Scheme:

This funding is provided in the form of vouchers issued by the UK Government, which go towards the purchase of electric vehicle charging points.

The grant cap is set at a maximum of £350 (including VAT) per socket. Each company can apply for up to 40 sockets (across all sites).

For more information, refer to: <u>https://www.gov.uk/government/publications/workplace-charging-scheme-guidance-for-applicants-installers-and-manufacturers</u>



5.3. Carbon offsetting

Carbon offsetting is a great way to compensate for the emissions that you cannot reduce, by funding an equivalent carbon dioxide saving elsewhere.

Salisbury City Council has taken a great first step in their carbon management journey by choosing to assess their company emissions. Following the declaration of a Climate Change Emergency at Full Council on 17th June 2019, Salisbury City Council already has a target to become Carbon Neutral by 2030. Although we recommend a reduction in emissions at their source, this often takes time to enact and can sometimes be a slow process. In order to compensate for the emissions already generated, they could look to offset through a variety of projects. This would enable the funding of an equivalent CO₂e saving elsewhere, as well as allowing Salisbury City Council to achieve our Carbon Neutral standard. This will allow Salisbury City Council to showcase their commitment to sustainability.

We can provide both UK-based and international projects for you to support. The majority of projects focus on the development of renewable energy in developing countries, however there are others which have a greater focus on social benefits as well as environmental benefits. Further detail on the type and specific projects that we currently have in our portfolio can be provided on request or be found at: <u>http://www.carbonfootprint.com/carbonoffsetprojects.html</u>.

Example of Carbon Offsetting Projects:



Tree Planting in UK Schools



Avoided Deforestation in the Brazilian Amazon



Clean Water in Rwanda



Keep up-to-date on law and best practice. Contact us to subscribe to our newsletters for regular updates.



5.5.Carbon Footprint Standard5.5.1.Brand endorsement

Salisbury City Council, in conjunction with Carbon Footprint Ltd, has assessed its carbon footprint. By achieving this Salisbury City Council has qualified to use the Carbon Footprint Standard branding. This can be used on all marketing materials, including website and customer tender documents, to demonstrate your carbon management achievements.



The Carbon Footprint Standard is recognition of your organisation's commitment to carbon management. The text to the right-hand side of the logo demonstrates what level you have achieved in line with international best practice.

5.5.2. Scope

As you are at the beginning of your Carbon Footprint Journey, you have decided to focus on the carbon footprint at the organisational level. This is a great start. Over time, you can progress your carbon footprinting to increase the scope and encompass your products, supply chain and your employees. By doing so you will be able to receive the Carbon Footprint Standard for these categories, thus standing out amongst your competitors and truly driving the sustainability or your brand.





Once the scope has been identified, the Carbon Footprint Standard will allow Salisbury City Council to develop from a novice to an exemplar in the market. You can progress from a Carbon Assessed Organisation to a Carbon Neutral or a Carbon Neutral Plus Organisation by supporting a range of environmental projects that come with wider CSR and PR opportunities.



Alongside the sustainability rationale, this will allow you to leverage the Carbon Footprint Standard to truly stand out in your market. Progressing will resonate with like-minded customers and will help your business grow.



5.5.3. Communicate

Make sure you communicate your actions and achievements effectively, both within your organisation, to help develop your culture, and externally to help improve your brand image.

When promoting your actions, be sure to utilise all marketing channels available to you, such as website, newsletters, brochures, press releases, conferences/events and social media etc.

You should:

- Explain why climate change matters to you (for more information visit: <u>www.carbonfootprint.com/warming.html</u>)
- Tell the story of where you have come from, the progress you have made and what your commitment is for the future (e.g. targets).
- Be clear and accurate about what you have achieved take care not to exaggerate.
- Use the Carbon Footprint Standard branding, certificates, images of offset projects you are supporting and graphs of your carbon performance to help communicate your point in a clear and enticing manner.



6. References

- 1. BEIS GHG Conversion Factors for Company Reporting (July 2019)
- 2. Guidelines to Defra's Greenhouse Gas (GHG) Conversion Factors for Company Reporting annexes (June 2013)
- 3. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (March 2004)
- 4. Salisbury City Council Climate Change <u>https://www.salisburycitycouncil.gov.uk/your-</u> <u>council/climate-change</u>
- 5. Brook Green Energy <u>https://www.brookgreensupply.com/supply</u>
- 6. Wessex Water Supply Charges (2019) <u>https://www.wessexwater.co.uk/your-account/your-bill/our-charges</u>



A. Annex A – Calculation Methodology (Additional Notes)

A.1 How is the carbon footprint calculated?

Carbon Footprint confirms that the methodology used to quantify the carbon footprint meets the following principles:

- a) The subject and its boundaries have been clearly identified and documented.
- b) The carbon footprint has been based on primary activity data unless the entity could not demonstrate that it was not practicable to do so, in which case an authoritative source of secondary data relevant to the subject was used.
- c) The methodology employed minimised uncertainty and yielded accurate, consistent and reproducible results.
- d) Emission factors used are germane to the activity concerned and current at the time of quantification.
- e) Conversion of non-CO₂ greenhouse gases to CO₂e has been based upon the 100-year Global Warming Potential figures published by the IPCC or national (Government) publication.
- f) Carbon footprint calculations have been made exclusive of any purchases of carbon offsets.
- g) All carbon footprints have been expressed as an absolute amount in tCO₂e.

A.2 Biomass

There are no CO₂ emissions from the combustion of biomass to be considered within this report.

A.3 Greenhouse gas removals

Within the calculation of Salisbury City Council's carbon footprint, there are no business processes resulting in the reduction of greenhouse gases from the atmosphere to be deducted from the calculation.



B. Annex B – Supplied Data and Emissions Breakdown

This annex shows the data that Salisbury City Council has supplied Carbon Footprint Ltd for the calculation of its emissions. At the end of each table one or several columns have been added that display the emissions and calculations associated for each item of data provided by Salisbury City Council. It should be noted that the latter has been calculated by Carbon Footprint Ltd, and not provided by Salisbury City Council.

B.1 Data used for Scope 1 emissions assessment

This section contains the data related to the direct emissions attributable to Salisbury City Council. These include the energy usage in Salisbury City Council's buildings (excluding purchased electricity, since this corresponds to Scope 2, indirect emissions), any company owned vehicle transport and any of the other six greenhouse gases produced.

| Site Name | Natural Gas | Unit | Country | Natural Gas (tCO₂e) |
|---|-------------|------|----------------|------------------------|
| Pavilion, The Portway, Stratford Sub Castle, Salisbury, SP1 3LD | 19,593 | kWh | United Kingdom | 3.60 |
| 60 Pinewood Way, Salisbury, SP2 9HU | 23,728 | kWh | United Kingdom | 4.36 |
| The Guildhall, Market Place, Salisbury, SP2 8NW | 174,767 | kWh | United Kingdom | 32.13 |
| 114 Carmelite Way, Salisbury, SP1 2HW | 9,354 | kWh | United Kingdom | 1.72 |
| Salisbury Crematorium, London Road, Salisbury, SP1 3JB | 1,285,197 | kWh | United Kingdom | 236.28 |
| Amenity Block, Hudson Field, Salisbury DC Castle Road, Salisbury, SP1 3SA | 98,471 | kWh | United Kingdom | 18.10 |
| Victoria Park Stratford Road, Salisbury, Wiltshire, SP1 3JJ | 30,555 | kWh | United Kingdom | 5.62 |
| Guidhall market square pillars | 30,556 | kWh | United Kingdom | 5.62 |
| Total | 1,672,221 | | | 307.44 |

Table 13: Data supplied and emissions breakdown for energy usage



| Registration Plate | Fuel Type | Travel Distance | Van Type | Distance Unit | Emissions (tCO ₂ e) |
|--------------------|-----------------|-----------------|---------------------|---------------|--------------------------------|
| BJ55ONL | Diesel (retail) | 1,416 | Average van (<3.5t) | mile | 0.57 |
| FL55HXS | Diesel (retail) | 326 | Average van (<3.5t) | mile | 0.13 |
| HG57XMD | Diesel (retail) | 962 | Average van (<3.5t) | mile | 0.39 |
| HG57XMF | Diesel (retail) | 931 | Average van (<3.5t) | mile | 0.38 |
| HJ61WVK | Diesel (retail) | 898 | Average van (<3.5t) | mile | 0.36 |
| ND59XOF | Diesel (retail) | 617 | Average van (<3.5t) | mile | 0.25 |
| RV62BYP | Diesel (retail) | 303 | Average van (<3.5t) | mile | 0.12 |
| YC11DKV | Diesel (retail) | 617 | Average van (<3.5t) | mile | 0.25 |
| YP61YCK | Diesel (retail) | 952 | Average van (<3.5t) | mile | 0.39 |
| REG | Diesel (retail) | 54 | Average van (<3.5t) | mile | 0.02 |
| HF04LBJ | Petrol (retail) | 90 | Average van (<3.5t) | mile | 0.04 |
| ND14XTF | Diesel (retail) | 71 | Average van (<3.5t) | mile | 0.03 |
| | | 7,237 | | | 2.93 |

Table 14: Data supplied and emissions breakdown for company owned van transportation

Table 15: Data supplied and emissions breakdown for refrigerant gas replenishment

| Location | Amount Refilled (kg) | nt Refilled (kg) Refrigerant type GWP (kg | | Emissions (tCO ₂ e) |
|----------------|----------------------|---|---------|--------------------------------|
| Guildhall | 2.5 | R410A | 2088.00 | 5.22 |
| Guildhall | 3.7 | R410A | 2088.00 | 7.73 |
| Guildhall | 1.4 | R410A | 2088.00 | 2.92 |
| Bemerton Heath | 0.65 | R410A | 2088.00 | 1.36 |
| | 8.25 | | | 17.23 |



B.2 Data used for Scope 2 emissions assessment

This section contains the data associated to the energy indirect emissions attributable to Salisbury City Council. The table below shows the purchased electricity, heat or steam usage in Salisbury City Council's buildings.

| Site Name | Grid Electricity | Unit | Country | Electricity Generation(tCO ₂ e) |
|---|---------------------|------|----------------|---|
| Unit 36 Netherhampton Road, Harnham Trading Est, Salisbury, SP2 8NW | 1,262 | kWh | United Kingdom | 0.32 |
| 18 College Street, Salisbury, SP1 3AL | 1,163 | kWh | United Kingdom | 0.30 |
| Hudsons Field, Castle Road, Salisbury, SP1 3RR | 7,256 | kWh | United Kingdom | 1.85 |
| Pavilion, The Portway, Stratford Sub Castle, Salisbury, SP1 3LD | 6,788 | kWh | United Kingdom | 1.74 |
| Toilets & Kitchen, Victoria Park, Castle Road, Salisbury, SP1 3SA | 3,691 | kWh | United Kingdom | 0.94 |
| Pavilion, Stratford Road, Salisbury, SP1 3JH | 8,244 | kWh | United Kingdom | 2.11 |
| 60 Pinewood Way, Salisbury, SP2 9HU | 7,501 | kWh | United Kingdom | 1.92 |
| 58 Pinewood Way, Salisbury, SP2 9HU | 4,682 | kWh | United Kingdom | 1.20 |
| Public Conveniences, Lower Road, Salisbury, SP2 9NW | 957 | kWh | United Kingdom | 0.24 |
| Toilet Block, Chhcl Gdn, Southampton Road, Salisbury, SP1 2LE | 2,397 | kWh | United Kingdom | 0.61 |
| Lush Car Park, Crane Bridge Road, Salisbury, SP2 7TD | 3,050 | kWh | United Kingdom | 0.78 |
| Public Toilets, Fisherton Recreation Ground, Westminster Road, Salisbury, SP2 7DG | 281 | kWh | United Kingdom | 0.07 |
| The Market Stalls, Guildhall Square, Salisbury, SP1 1JH | 27,479 | kWh | United Kingdom | 7.02 |
| Gardeners Ascn Bld, Westminster Road, Salisbury, SP2 7DG | 836 | kWh | United Kingdom | 0.21 |
| 58a Pinewood Way, Salisbury, SP2 9HU | 11,233 | kWh | United Kingdom | 2.87 |
| The Guildhall, Market Place, Salisbury, SP2 8NW | 75,695 | kWh | United Kingdom | 19.35 |
| Sports Pavilion, Harnham Road, Salisbury, SP2 8JG | 9,481 | kWh | United Kingdom | 2.42 |
| 114 Carmelite Way, Salisbury, SP1 2HW | 3,306 | kWh | United Kingdom | 0.85 |
| Plot 1 (Dxz469a01), Queen Street, Guildhall Square, Salisbury, SP1 1JH | 4,130 | kWh | United Kingdom | 1.06 |
| Unit 12 Netherhampton Road, Harnham Trading Est, Salisbury, SP2 8NW | 9,741 | kWh | United Kingdom | 2.49 |

Table 16: Data supplied and emissions breakdown for purchased electricity usage



| Site Name | Grid Electricity | Unit | Country | Electricity Generation(tCO ₂ e) |
|--|---------------------|------|----------------|---|
| Salisbury Crematorium, London Road, Salisbury, SP1 3JB | 104,811 | kWh | United Kingdom | 26.79 |
| Guidhall market square pillars | 1,018 | kWh | United Kingdom | 0.26 |
| Festive lighting/ estimate for street lighting | 24,493 | kWh | United Kingdom | 6.26 |
| Total | 319,494 | | | 81.66 |

B.3 Data used for Scope 3 emissions assessment

The tables below demonstrate the company's employee business travel (not including staff commuting), any outsourced transport, and emissions from the transmission and distribution of purchased energy.

Table 17: Data supplied and emissions breakdown for staff business travel by employee-owned car

| Annual Distance | Car Type | Distance unit | Emissions (tCO ₂ e) |
|-----------------|----------------------|---------------|--------------------------------|
| 9,673 | Average Unknown Fuel | mile | 2.76 |

| Type of Taxi | Annual cost (£) | No of Journeys | Distance Unit | Passenger Distance (km) | Emissions (tCO ₂ e) |
|--------------|-----------------|----------------|---------------|-------------------------|--------------------------------|
| Regular taxi | £22.00 | 1 | mile | 23.77 | 0.0036 |

Table 18: Data supplied and emissions breakdown for staff business travel by taxi

Table 19: Data supplied and emissions breakdown for paper consumption.

| Paper type | Number of sheets | Weight (kg) | Total Emissions (tCO ₂ e) |
|-------------|------------------|-------------|--------------------------------------|
| Virgin – A4 | 211,432 | 1,054.96 | 1.005 |
| Virgin – A3 | 11,128 | 111.05 | 0.105 |
| Total | 222,560 | 1,166.01 | 1.11 |



Table 20: Data supplied and emissions breakdown for the transmission and distribution of purchased electricity.

| Site Name | Grid Electricity | Unit | Country | Electricity T&D (tCO2e) |
|---|---------------------|------|----------------|----------------------------|
| Unit 36 Netherhampton Road, Harnham Trading Est, Salisbury, SP2 8NW | 1,262 | kWh | United Kingdom | 0.03 |
| 18 College Street, Salisbury, SP1 3AL | 1,163 | kWh | United Kingdom | 0.03 |
| Hudsons Field, Castle Road, Salisbury, SP1 3RR | 7,256 | kWh | United Kingdom | 0.16 |
| Pavilion, The Portway, Stratford Sub Castle, Salisbury, SP1 3LD | 6,788 | kWh | United Kingdom | 0.15 |
| Toilets & Kitchen, Victoria Park, Castle Road, Salisbury, SP1 3SA | 3,691 | kWh | United Kingdom | 0.08 |
| Pavilion, Stratford Road, Salisbury, SP1 3JH | 8,244 | kWh | United Kingdom | 0.18 |
| 60 Pinewood Way, Salisbury, SP2 9HU | 7,501 | kWh | United Kingdom | 0.16 |
| 58 Pinewood Way, Salisbury, SP2 9HU | 4,682 | kWh | United Kingdom | 0.10 |
| Public Conveniences, Lower Road, Salisbury, SP2 9NW | 957 | kWh | United Kingdom | 0.02 |
| Toilet Block, Chhcl Gdn, Southampton Road, Salisbury, SP1 2LE | 2,397 | kWh | United Kingdom | 0.05 |
| Lush Car Park, Crane Bridge Road, Salisbury, SP2 7TD | 3,050 | kWh | United Kingdom | 0.07 |
| Public Toilets, Fisherton Recreation Ground, Westminster Road, Salisbury, SP2 7DG | 281 | kWh | United Kingdom | 0.01 |
| The Market Stalls, Guildhall Square, Salisbury, SP1 1JH | 27,479 | kWh | United Kingdom | 0.60 |
| Gardeners Ascn Bld, Westminster Road, Salisbury, SP2 7DG | 836 | kWh | United Kingdom | 0.02 |
| 58a Pinewood Way, Salisbury, SP2 9HU | | kWh | United Kingdom | 0.24 |
| The Guildhall, Market Place, Salisbury, SP2 8NW | 75 <i>,</i> 695 | kWh | United Kingdom | 1.64 |
| Sports Pavilion, Harnham Road, Salisbury, SP2 8JG | 9,481 | kWh | United Kingdom | 0.21 |
| 114 Carmelite Way, Salisbury, SP1 2HW | 3,306 | kWh | United Kingdom | 0.07 |
| Plot 1 (Dxz469a01), Queen Street, Guildhall Square, Salisbury, SP1 1JH | 4,130 | kWh | United Kingdom | 0.09 |
| Unit 12 Netherhampton Road, Harnham Trading Est, Salisbury, SP2 8NW | 9,741 | kWh | United Kingdom | 0.21 |
| Salisbury Crematorium, London Road, Salisbury, SP1 3JB | 104,811 | kWh | United Kingdom | 2.27 |
| Guidhall market square pillars | 1,018 | kWh | United Kingdom | 0.02 |
| Festive lighting/ estimate for street lighting | 24,493 | kWh | United Kingdom | 0.53 |
| Total | 319,494 | | | 6.93 |



Table 21: Data supplied and emissions breakdown from water supply and treatment

| Site | Water supply (m³) | Water Supply (tCO₂e) | Estimated wastewater % | Wastewater treatment (tCO ₂ e) | Total emissions from water consumption (tCO ₂ e) |
|---------------------------|----------------------|-------------------------|---------------------------|--|--|
| Main sites | 4384 | 1.51 | 100 | 3.15 | 4.66 |
| Public conveniences | 4173 | 1.44 | 100 | 3.00 | 4.43 |
| Market stalls and pillars | 22 | 0.01 | 100 | 0.02 | 0.02 |
| Allotments | 5350 | 1.84 | 100 | 3.84 | 5.68 |
| Totals | | 4.79 | | 10.01 | 14.80 |

Table 22: Data supplied and emissions breakdown from waste.

| Type of Waste | Category | Waste produced per year (tonnes) | Disposal Route | Total Emissions (tCO ₂ e) |
|----------------------------|------------|----------------------------------|---------------------------------------|--------------------------------------|
| Municipal waste, average | Residual | 115.73 | Energy Recovery (Combustion) | 2.47 |
| Average plastics | Recyclable | 4.93 | Open Loop Recycling | 0.11 |
| Glass | Recyclable | 0.25 | Open Loop Recycling | 0.01 |
| Municipal waste, average | Residual | 0.07 | Energy Recovery (Combustion) | 0.00 |
| Municipal waste, average | Residual | 7.00 | Energy Recovery (Combustion) | 0.15 |
| Garden Waste | Green | 24.00 | Energy Recovery (Anaerobic Digestion) | 0.24 |
| Garden Waste | Green | 19.36 | Energy Recovery (Anaerobic Digestion) | 0.20 |
| Municipal waste, average | Residual | 3.20 | Energy Recovery (Combustion) | 0.07 |
| Garden Waste | Green | 0.68 | Energy Recovery (Anaerobic Digestion) | 0.01 |
| Paper | Recyclable | 0.50 | Closed Loop Recycling | 0.01 |
| Garden Waste | Green | 0.02 | Landfill | 0.01 |
| Batteries (Non-Automotive) | Hazardous | 0.02 | Landfill | 0.00 |
| Total | | 175.75 | | 3.27 |



B.4 Scope 1 emissions breakdowns

The table below demonstrates the company's Scope 1 CO₂e emissions in their respective greenhouse gases.

| Activity | kg CO₂e | kg CO ₂ in CO ₂ e | kg CH_4 in CO_2e | kg N ₂ O in CO ₂ e |
|-----------------------------|-----------|---|----------------------|--|
| Site gas | 307437.83 | 306870.03 | 403.97 | 164.21 |
| Refrigerants | 17226.00 | 0.00 | 0.00 | 0.00 |
| Vehicle fuel usage | 19795.28 | 0.00 | 0.00 | 0.00 |
| Van travel and distribution | 2930.62 | 0.00 | 0.00 | 0.00 |
| Total | 347389.73 | 306870.03 | 403.97 | 164.21 |

Table 23: CO₂e Emissions breakdown for Scope 1 emissions into their greenhouse gases.