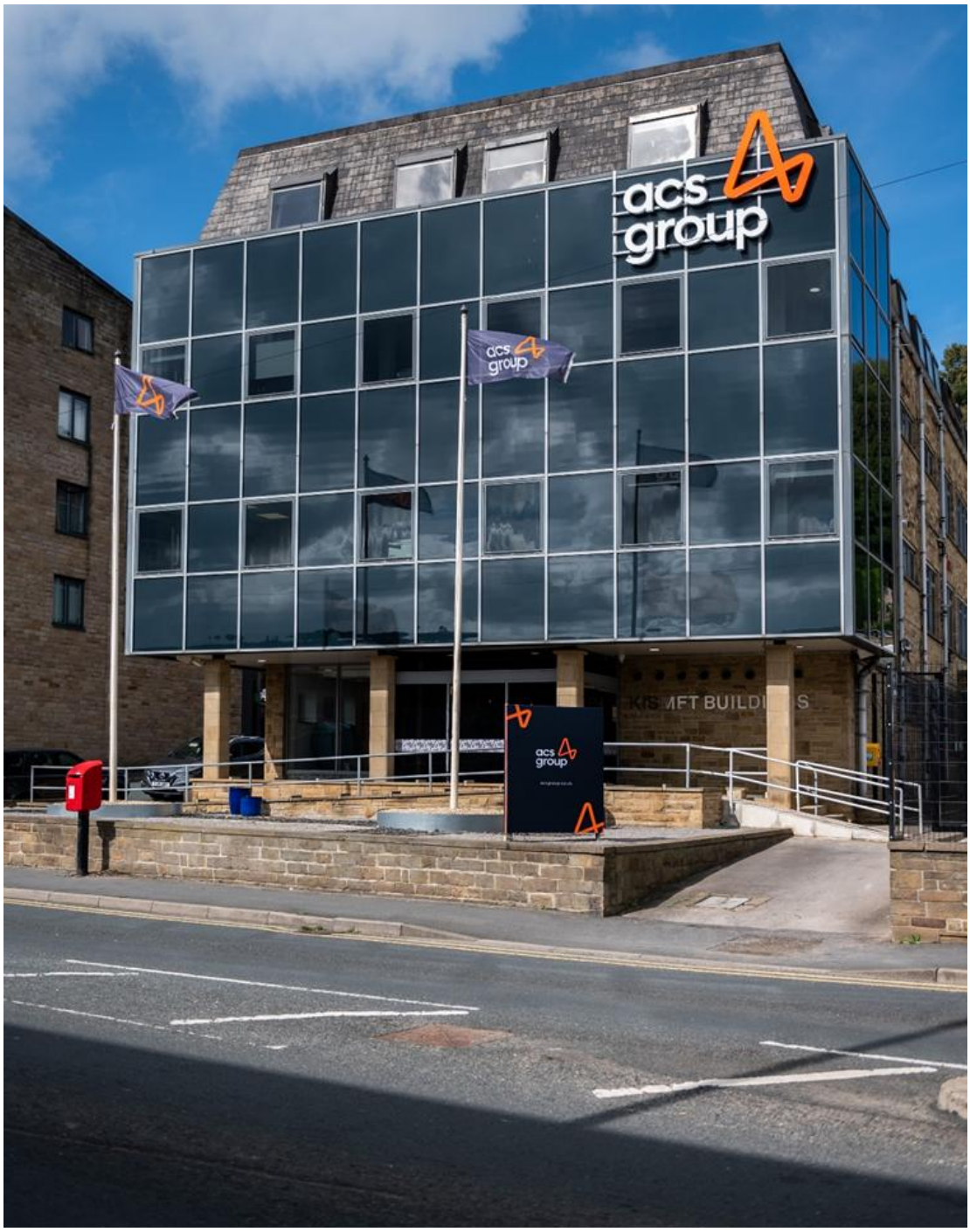
ISO 14064 Greenhouse Gas Report

July 2025



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Chapter 1: General Description of the Organisation and Inventory Objectives

1.1 Organisation Overview

ACS Group is a leading provider of office consumables, equipment, and furniture, operating primarily across mainland Britain. Since our founding in 2008, we have built strong partnerships with major suppliers such as HP and Xerox and have embedded sustainability into our core operations. We have actively participated in carbon reduction initiatives since 2016.

1.1.2 GHG Inventory Summary

- **Reporting Standard:** ISO 14064-1:2018
- **Reporting Period:** 1st January 2024 – 31st December 2024
- **Organisational Boundary:** Operational control approach
- **Scopes Covered:**
  - **Scope 1:** Direct emissions from owned or controlled sources
  - **Scope 2:** Indirect emissions from purchased electricity
  - **Scope 3 (Relevant Categories):** Business travel, waste, upstream transportation, and distribution.

1.2 Purpose and Objectives of the Report

This document serves as the Greenhouse Gas Report (GGR) in accordance with ISO 14064-1:2018, demonstrating ACS Business Supplies' commitment to the quantification, reporting, and verification of greenhouse gas (GHG) emissions at its Otley Road sites. The reporting period covered is from 1st January 2024 to 31st December 2024. This will be the new baseline year. This GGR will be reviewed and updated as necessary to reflect any material changes in emissions, methodology, or organisational boundaries.

1.3 Intended Use and Dissemination Policy

This Greenhouse Gas Report (GGR) will be made publicly available via the ACS Group website and internally through our company hub. Should any material changes occur that affect the validity of this statement, the GGR will be updated accordingly.

This document represents the second verified GHG declaration by the ACS Group and reinforces our commitment to environmental transparency and continuous improvement.

1.7 Data and Information Included

The GHG inventory includes the following gases, where applicable:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)

Biogenic CO_2 emissions are excluded from the total CO_2e figures but are disclosed separately where relevant, in accordance with ISO 14064-1:2018 guidance.

1.8 Verification Statement

This GHG statement has been independently verified by BSI in accordance with ISO 14064-3:2019, providing limited assurance that the GHG inventory is materially correct and prepared in accordance with ISO 14064-1.

BSI confirms that:

- The GHG quantification methodologies are appropriate and consistently applied
- The data sources, assumptions, and emission factors are transparent and traceable
- The GHG statement is free from material misstatement

1.9 Level of Assurance Summary

Type of Assurance	Verification Body	Standard Used	Scope Covered	Level of Assurance
Third-party Independent Verification	BSI	ISO 14064-3:2019	Scopes 1, 2, and relevant Scope 3 categories	Limited Assurance

Chapter 2: Organisational Boundaries

2.1 Description of Boundaries

ACS Group has adopted the operational control approach in accordance with ISO 14064-1:2018 to define its organisational boundaries. This includes all facilities and operations over which ACS Group has the authority to introduce and implement operating policies.

The company operates from a single site with no on-site combustion of fossil fuels. All energy consumption is electric, sourced from the national grid and supplemented by on-site solar photovoltaic generation. Heating and cooling are provided via an integrated HVAC system containing fluorinated gases (F-gases); however, the most recent inspection report confirmed no leaks or losses, and therefore no associated emissions are reported.

ACS Group operates a fully electric vehicle fleet as of **December 2024**; however, Scope 1 emissions were recorded during the early part of the 202**5** reporting year due to the use of legacy internal combustion engine vehicles. These emissions have been quantified and included in the Scope 1 total.

All electricity purchased from the grid is supplied by British Gas. Accordingly, Scope 2 emissions are reported as zero under the market-based method. For transparency, location-based emissions have also been calculated and disclosed separately.

Scope 3 emissions are reported across all relevant categories, including:

Purchased goods and services

Capital goods

Fuel- and energy-related activities not included in Scope 1 or 2

Upstream and downstream transportation and distribution

Waste generated in operations

Business travel

Employee commuting

Water Usage and treatment

Homeworking

All emissions are reported in metric tonnes of carbon dioxide equivalent (tCO_2e) and broken down by chemical compound where applicable. Given the nature of ACS Group's operations, the relevant greenhouse gases are:

Carbon dioxide (CO_2)

Methane (CH_4)

Nitrous oxide (N_2O)

Other high-GWP gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) are not emitted by ACS Group and are therefore excluded from this inventory.

2.2 Consolidation Methodology

ACS Group has applied the operational control approach to consolidate greenhouse gas (GHG) emissions across its organisational boundary, in accordance with ISO 14064-1:2018. Under this approach, ACS Group accounts for 100% of the GHG emissions from operations over which it has full authority to introduce and implement operating policies.

This methodology was selected as it most accurately reflects the company's ability to influence emissions through operational decisions and environmental management practices. It ensures that all emissions from activities under ACS Group's direct control are captured, including those from its owned facilities and fleet (where applicable).

The operational control approach is particularly appropriate for ACS Group's structure, which consists of a single operational site and a centralised management system. It also aligns with the company's internal reporting processes and sustainability objectives.

Emissions from activities outside ACS Group's operational control, such as third-party logistics and supply chain operations, are reported under Scope 3, in accordance with the GHG Protocol's categorisation of indirect emissions.

Chapter 3: Reporting Boundaries

3.1 Emission Categories Considered

The following table outlines the greenhouse gas (GHG) emission categories considered by ACS Group, in accordance with ISO 14064-1:2018. Emissions are categorised by scope and include the relevant GHG components measured.

Scope	Category	Description	GHG Components Measured
Scope 1	Direct emissions	Fuel combustion from legacy fleet vehicles used during early 2024	CO_2, CH_4, N_2O
Scope 2	Energy indirect emissions	Purchased electricity from British Gas	CO_2, CH_4, N_2O (location-based only; market-based = 0)
Scope 3	Category 1	Purchased goods and services	CO_2, CH_4, N_2O
	Category 2	Capital goods	CO_2, CH_4, N_2O
	Category 3	Fuel- and energy-related activities not included in Scope 1 or 2	CO_2, CH_4, N_2O
	Category 4	Upstream transportation and distribution	CO_2, CH_4, N_2O
	Category 5	Waste generated in operations	CO_2, CH_4, N_2O
	Category 6	Business travel	CO_2, CH_4, N_2O
	Category 7	Employee commuting	CO_2, CH_4, N_2O
	Category 9	Downstream transportation and distribution	CO_2, CH_4, N_2O
	Category 11	Use of sold products	CO_2, CH_4, N_2O
	Category 12	End-of-life treatment of sold products	CO_2, CH_4, N_2O

3.2 Criteria for Significant Emissions

ACS Group has established a set of criteria to determine the significance of greenhouse gas (GHG) emissions for inclusion in its GHG inventory. These criteria are based on a combination of quantitative thresholds, qualitative relevance, and materiality to stakeholders, in line with ISO 14064-1:2018 guidance.

The following criteria have been applied:

3.2.1. Quantitative Threshold

Emission sources contributing ≥1% of the total organisational GHG emissions are considered significant and are included in full.

Emission sources contributing <1% may still be included if deemed relevant under qualitative criteria.

3.2.2. Qualitative Relevance

Emissions are considered significant if they:

Are subject to regulatory reporting or compliance requirements.

Are associated with key stakeholder concerns (e.g. customers, investors, or supply chain partners).

Represent emerging risks or opportunities (e.g. transition to electric vehicles, renewable energy procurement).

Are strategically important to ACS Group's sustainability goals or brand reputation.

3.2.3. Data Availability and Estimation Reliability

Emission sources for which reliable data can be obtained or reasonably estimated are prioritised for inclusion.

Sources with high uncertainty may be excluded only if their impact is demonstrably immaterial and documented accordingly.

These criteria ensure that the GHG inventory is both comprehensive and decision-useful, while maintaining transparency and consistency across reporting periods.

3.3 Exclusions

ACS Group has aimed to provide a comprehensive and transparent greenhouse gas (GHG) inventory. However, in accordance with ISO 14064-1:2018, certain emission sources have been excluded from this report. These exclusions are based on materiality, data availability, and relevance to operations. Each exclusion is justified below:

3.3.1. High-GWP Industrial Gases

Excluded Gases: Sulphur hexafluoride (SF_6), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3)

Justification: These gases are not used in ACS Group's operations. The company does not engage in activities such as high-voltage electrical insulation, aluminium smelting, or semiconductor manufacturing where these gases are typically present.

3.3.2. Fugitive Emissions from HVAC Systems

Excluded Emissions: Fugitive emissions from fluorinated gases (HFCs) in air conditioning systems

Justification: ACS Group's HVAC system is regularly maintained and inspected. The most recent F-gas inspection report confirmed no leaks or losses. As such, no emissions have been recorded or estimated for this source.

3.3.3. Scope 3 Categories Not Relevant to ACS Group

Excluded Categories:

- Category 8: Upstream leased assets
- Category 10: Processing of sold products
- Category 13: Downstream leased assets
- Category 14: Franchises
- Category 15: Investments

Justification: These categories are not applicable to ACS Group's business model or operational structure. The company does not lease assets upstream or downstream, does not process sold products, and does not operate franchises or hold investments that generate GHG emissions.

All exclusions have been assessed against ACS Group's significance criteria (see Section 3.2) and are considered immaterial to the overall GHG inventory.

Chapter 4: Quantified GHG Inventory of Emissions and Removals

4.1 Emissions and Removals by Category

The following table presents quantified greenhouse gas (GHG) emissions and removals by category and gas for ACS Group. Emissions are reported in metric tonnes of CO_2, CH_4, and N_2O, along with the total CO_2 equivalent (CO_2e) per category. Scope 2 emissions are shown using both market-based and location-based methods.

4.2 Methodologies and Activity Data

ACS Group has applied recognised methodologies and emission factors to quantify greenhouse gas (GHG) emissions across all relevant scopes and categories. The approach follows the principles of relevance, completeness, consistency, transparency, and accuracy, as outlined in ISO 14064-1:2018 and the GHG Protocol.

4.2.1 Quantification Methodologies

Scope 1

Emissions from legacy fleet vehicles were calculated using fuel consumption data and DEFRA 2024 emission factors for petrol and diesel combustion.

Scope 2 emissions were calculated using:
The location-based method, using the UK national grid average emission factors published by DEFRA.

Scope 3 emissions were estimated using a combination of:

- Spend-based data (e.g. for purchased goods and capital goods)
- Distance and weight-based data (e.g. for transportation and distribution)
- Activity-based data (e.g. number of employees commuting, business travel mileage)
- Waste tonnage and disposal method (e.g. landfill, recycling)
- Emission Factors and Sources
- All emission factors were sourced from the UK Government GHG Conversion Factors for Company Reporting (DEFRA 2024).
- Global Warming Potentials (GWPs) used to convert gases to CO_2e are based on the IPCC Fifth Assessment Report (AR5).
- GHG Components Measured
- Emissions were quantified for the following gases, where applicable:
- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- These were converted to tonnes of CO_2 equivalent (tCO_2e) using the appropriate GWP values.

Data Sources

- Internal records (e.g. fuel receipts, electricity bills, procurement data)

- Supplier-provided data (e.g. delivery distances, product volumes)
- Employee surveys (e.g. commuting patterns)
- Waste contractor reports
- All calculations and assumptions have been documented and reviewed to ensure traceability and audit readiness.

4.3 Emission/Removal Factors

ACS Group has used recognised and up-to-date emission and removal factors to quantify greenhouse gas (GHG) emissions and removals across all relevant scopes and categories. These factors ensure consistency, transparency, and comparability in line with ISO 14064-1:2018 and the GHG Protocol.

Primary Sources of Emission Factors

UK Government GHG Conversion Factors for Company Reporting (DEFRA 2024)

Used for fuel combustion, electricity consumption (location-based), business travel, waste disposal, and transport-related emissions.

Supplier-specific data

Where available, supplier-provided emission factors were used for purchased goods and services, capital goods, and logistics.

IPCC Fifth Assessment Report (AR5)

Global Warming Potentials (GWPs) used to convert CH_4 and N_2O into CO_2 equivalent (CO_2e) values.

Removal Factors

ACS Group does not currently operate any carbon removal projects (e.g. afforestation, carbon capture and storage). As such, no removal factors have been applied in this reporting period.

All emission factors used are documented in the emissions calculation workbook and are traceable to their original sources. Where assumptions or proxies were used, these are clearly stated and justified in the relevant calculation notes.

4.4 Uncertainty and Accuracy

ACS Group acknowledges the presence of uncertainty in GHG quantification, particularly within Scope 3 categories due to reliance on estimates and third-party data. The impact of uncertainty is mitigated through:

- Use of conservative assumptions
- Documentation of all methodologies and sources
- Continuous improvement of data collection processes

Planned improvements include enhanced supplier engagement, improved data granularity, and integration of automated tracking systems to reduce estimation reliance.

4.5 Baseline Year Recalculation Procedure (ISO 14064-1:2018, 6.4.2)

ACS has adopted a formal baseline year recalculation procedure to ensure consistency and comparability of greenhouse gas (GHG) data over time. In line with ISO 14064-1:2018 requirements, the baseline year is reviewed and adjusted when significant changes occur that materially impact the GHG inventory, such as structural changes, acquisitions, divestments, or the inclusion of additional emission sources and measurement improvements. Additionally, ACS will rebaseline if large or cumulative errors are discovered in the data or underlying processes, ensuring the integrity and reliability of reported information. All recalculations will be transparently documented to maintain compliance with ISO 14064-1 principles of relevance, consistency, and accuracy. For this reporting cycle, ACS is re-establishing its baseline year as 2024 (1 January 2024 – 31 December 2024). This decision reflects the substantial expansion of measurement coverage and data accuracy introduced during this period, making 2024 an appropriate reference point for future performance tracking and target setting.

4.6 Data Gaps and Mitigation Plan

ACS Group recognises that, despite its best efforts to collect comprehensive and accurate greenhouse gas (GHG) data, there may be instances where certain activity data is unavailable or incomplete during the reporting period. To ensure the integrity and continuity of the GHG inventory, the following mitigation plan is implemented:

- **Use of Historic Data**: Where current-year data is missing or inaccessible, ACS Group will use the most recent and relevant historic data as a proxy. This may include prior year consumption figures, activity levels, or supplier data, adjusted for known changes in operations or scale where possible.
- **Conservative Estimation**: In the absence of both current and historic data, conservative estimation methods will be applied. These may involve using industry benchmarks, published averages, or upper-bound estimates to avoid under-reporting emissions.
- **Documentation and Transparency**: All instances where fallback data or estimation methods are used will be clearly documented in the emissions calculation workbook and supporting notes. The rationale, data sources, and any adjustment factors will be transparently disclosed to facilitate audit and review.

- **Continuous Improvement**: ACS Group is committed to reducing data gaps over time by enhancing data collection processes, engaging with suppliers, and implementing automated tracking systems. Lessons learned from each reporting cycle will inform targeted improvements for future inventories.

Chapter 5: GHG Reduction Initiatives and Internal Performance Tracking

5.1 Reduction Initiatives

ACS Group has implemented a series of targeted initiatives to reduce greenhouse gas (GHG) emissions across Scopes 1, 2, and 3. These initiatives are aligned with our Net Zero 2050 commitment and are reviewed annually for effectiveness.

5.1.1 Fleet Electrification

- **Objective**: Eliminate Scope 1 emissions from company vehicles.
- **Action**: ACS completed its transition to a fully electric fleet in **December 2024**, with the final diesel vehicle retired at the end of the year.
- **Impact**: Scope 1 emissions for 2024 were significantly reduced to **2,838.58 kg CO_2e**, reflecting a near-complete year of electric vehicle usage, with only minimal emissions from the diesel vehicle used early in the year.

5.1.2 Onsite Renewable Energy Generation

- **Objective**: Reduce reliance on grid electricity and Scope 2 emissions.
- **Action**: Installed solar panels generating **51,978 kWh** in 2024.
- **Impact**: Offset a substantial portion of electricity demand with zero-emission energy.

5.1.3 Remote Working & Meeting Policy

- **Objective**: Reduce business travel and commuting emissions.
- **Action**: Promoted remote meetings and flexible working arrangements.
- **Impact**: Homeworking emissions decreased from **4.62 tCO_2e to 3.97 tCO_2e**.

5.1.4 Waste and Water Management

- **Objective**: Minimise Scope 3 emissions from waste and utilities.
- **Action**: Partnered with Biffa to achieve **zero waste to landfill**; improved water efficiency.
- **Impact**: Maintained zero landfill status and reduced water-related emissions.

5.2 Performance Tracking

ACS Group employs a structured performance tracking framework to monitor progress against GHG reduction targets and ensure continuous improvement.

5.2.1 Monitoring Tools

Solar Report V2

Horizon nominal reports

External agency portals i.e. Biffa, Yorkshire Water and British Gas

5.2.2 Internal Reporting

- Emissions data is reviewed in monthly operational meetings.
- Performance is benchmarked against the **2024 baseline**.
- Deviations trigger corrective actions and are escalated as necessary

5.3 Annual Review

- The Carbon Management Plan is reviewed annually by the Sustainability Manager and approved by the CEO.
- Results are published in the annual Greenhouse Gas Report and shared internally via the company hub.

6.0 Public Disclosure and Updates

This Greenhouse Gas Report (GGR) will be made publicly available via the ACS Group website and internally through our company hub. Should any material changes occur that affect the validity of this statement, the GGR will be updated accordingly.

This document represents the second verified GHG declaration by the ACS Group and reinforces our commitment to environmental transparency and continuous improvement.

7.0 Carbon Footprint Summary

Baseline Year: 2024

Scope	*Emission*	*Co2e Emissions (kg)*	*Co2e Emissions (TONNES)*
C1.2	Mobile Combustion	2838.58	2.84
C2.1	Electricity	29097.97	29.10
C3.3	Business Commuting	56233	56.23
C3.5	Business Travel	13926	13.93
C3.5	Hotel Stays	811	0.81
C4	WTT Transmission and Distribution losses	3127	3.13
C3.5	Public Transport	1025.48	1.03
C6	Homeworking	4021	4.02
C3.1	Upstream Transport and Distribution	284367	284.37
C4.1	Purchased Goods	33174	33.17
C6	Water / Waste Water	353.95	0.35
C5.1	Waste	4964	4.96
		433938.98	433.94

Total CO2e Emissions: 433.94t

7.1 Scope 1 Emissions

Scope 1 emissions arise from business travel. ACS transitioned to a fully electric fleet in December 2024. Total Scope 1 emissions: 2,838.58 kg CO2e.

Emissions Category 1.2 Direct Emissions from Mobile Combustion

Scope 1 is a culmination of Fuel for the company van and owned non-electric company cars.

Literage calculated by the 2024 UK average Petrol price 142p per litre.
Fuel prices rise for third month in a row but still close to level las

Van Fuel	1991.92
Owned Cars	846.61
Total kg for 2024	**2838.53**

Additional gases included in scope 1 for travel in company cars.

Scope 1 Gases

		0.33362	0.33092	0.00001	0.00269
Car Type	Total Miles	kg CO_2e	g CO_2e of CO_2 per u	kg CO_2e of CH_4 per unit	kg CO_2e of N_2O per unit
Medium Diesel	**3129.78**	**1044.157204**	**345.5325018**	**0.0312978**	**8.4191082**

7.1.1 Uncertainties

Uncertainty arises from the calculation method employed, as mileage data was derived from expense claims rather than direct measurement. While these claims are assumed to be accurate, the process relies on the honesty and integrity of staff when submitting mileage information. Consequently, there is an inherent estimation risk, as the organisation has limited capacity to independently verify the precise distances travelled.

7.2 Scope 2 Emissions

ACS Calculate indirect emissions from energy bills dated January 2024 through December 2024. Total Scope 2 emissions: 29,097.97 kg CO2e.

Calculated from energy bills.

Emissions Category 2.1 Indirect emissions from imported electricity

Electric Vehicles	3430
Electricity CO2e	25667.97
Total kg CO2e 2024	**29097.97**

7.2.1 Uncertainties

Uncertainty in this data set is minimal, as the information has been obtained directly from the energy supplier. Given the accuracy and reliability of supplier-provided data, the associated uncertainty is considered negligible.

7.3 Scope 3 Emissions

Scope 3 emissions include upstream transport and distribution, business commuting, business travel, well-to-tank (WTT) transmission losses, waste, water consumption, hotel stays, purchased goods, and homeworking.

Total Scope 3 emissions have been calculated using a combination of employee surveys and supplier-provided data, ensuring a comprehensive and representative assessment of indirect emissions across the value chain.

Emissions Category 3.1 Emissions from Upstream Transport and Distribution

Emissions for upstream transport and distribution were calculated using spend-based data in conjunction with the Defra 2022 SIC multiplier. Annual delivery costs for the entire business were multiplied by 49.3–5 of the Defra 2022 SIC multiplier, with adjustments made to account for inflation between 2022 and 2024. This approach ensures alignment with recognised emission factor methodologies and provides a consistent basis for estimating transport-related emissions.

Inflation taken into account 2024	
Annual Transport Charges	£447,170.42
CO2 (kgCO2 per £)	**284,367.21**
Defra 2022 SIC Multiplier 2022	

Uncertainties

Uncertainty in this calculation primarily arises from the reliance on financial spend data rather than direct activity data (e.g., actual distance travelled or fuel consumption). While the Defra SIC multiplier provides a robust industry-standard factor, variations in supplier efficiency, vehicle type, and load utilisation introduce an inherent margin of error. Inflation adjustments further add a minor degree of estimation risk. To mitigate these uncertainties, ACS plans to engage suppliers for more granular activity-based data in future reporting cycles.

Emissions Category 3.3 Emissions from commuting includes emissions

Emissions from commuting were assessed through in-person discussions with all staff regarding their travel methods to work. Each employee was asked to identify their primary mode of transport. In cases where multiple modes were used, employees were asked whether one mode accounted for more than 80% of their commuting. All respondents confirmed this, enabling the use of their predominant mode of transport for emissions calculations.

Total Mileage 2024	244603 miles
Total Co2e kg	56,233kg

Total Co2e kg - 56,233

Uncertainties

Uncertainty in this category primarily arises from the reliance on self-reported data, which assumes accuracy and honesty in employee responses. Additional variability may occur due to seasonal changes, occasional alternative travel modes, or incomplete recall of commuting habits. While these factors introduce a degree of estimation risk, the overall impact is considered low given the structured approach and direct engagement with staff. Future improvements may include periodic surveys or digital tracking tools to enhance data accuracy.

Emissions Category 3.5 Emissions from business travels

Emissions from business travel were calculated using Travel Expense Nominals recorded in the Horizon system. Mileage was determined based on the nominated pence-per-mile rate and the total expense claimed, ensuring alignment with recognised calculation methodologies.

Total Mileage for 2024	51541mi
Total kg for 2024	13926.99

Emissions Category 3.5 Public Transport

Public transport emissions were calculated using nominal data extracted from the Horizon system. Where journey distances could be directly identified, these were applied in full. For taxi and underground travel, average UK journey distances were used—specifically, the national average for tube journeys and the average Uber trip distance for taxi mileage. For train journeys lacking destination details, an average cost-per-mile rate of £0.46 (derived from confirmed journeys) was applied to estimate distance and associated emissions. All references and supporting data are available upon request.

Mode of Transport	Total km
Bus	66.3
Coach	55.36
Flight	420
Taxi	238.98
Train	23652.26
Tube	171
Total CO2e kg - 1025.48	

automated travel reporting solutions.

Uncertainties

Uncertainty in this category primarily arises from the use of financial and average-distance data rather than precise journey records. While the methodology follows Defra guidance and uses verified averages, variations in actual travel distances, routes, and modes introduce a degree of estimation risk. To reduce uncertainty in future reporting cycles, ACS plans to enhance data capture by requesting detailed journey information and exploring

Emissions Category 3.5 Hotel Stays

Emissions from business travel related to accommodation were calculated using Hotel Expense Nominals recorded in the Horizon system. Hotel descriptions were reviewed to identify locations, which were then used to determine the appropriate emission factors for each stay.

Activity	Country	Unit	kg CO_2e	Nights
Hotel stay	UK	Room per night	10.40000	55
	UK (London)	Room per night	11.50000	14
Hotel stay	Netherlands	Room per night	14.80000	1
		Total Co2e	**811**	

Uncertainties

Uncertainty in this category is primarily associated with the reliance on expense data and hotel descriptions, which may not always provide complete details such as exact location or duration of stay. While the methodology applies recognised emission factors, variations in hotel energy efficiency and regional differences introduce a degree of estimation risk. To reduce uncertainty in future reporting cycles, ACS plans to request more detailed booking information and explore automated data capture from travel management systems.

Emissions Category 4 WTT Transmission and Distribution Losses

Well-to-Tank (WTT) transmission and distribution losses were calculated using ACS's total electricity consumption of 123,969 kWh, as obtained directly from supplier invoices.

Emission factors were applied in accordance with recognised Defra guidance. For electric vehicles, total mileage for 2024 was used to calculate associated WTT emissions, while van fuel emissions were determined using WTT petrol emission factors.

	kg CO2e
Total Electricity	2268.65
Total Diesel	555.1636922
Total EV	303.5164
	3127.330092

Uncertainties

Uncertainty in this category is minimal, as electricity consumption data was sourced directly from supplier billing records. However, minor estimation risk exists for electric vehicle mileage and van fuel usage, as these rely on accurate internal reporting. To further reduce uncertainty, ACS plans to implement enhanced data capture methods, such as telematics and automated fuel reporting, in future reporting cycles.

Emissions Category 4.1 Emissions from Purchased Goods

Emissions associated with purchased goods were calculated using the Defra 2022 SIC multiplier. All ACS internal orders were reviewed, and appropriate SIC codes were assigned to each product category to ensure accurate classification. Inflation adjustments were applied to reflect cost changes between 2022 and 2024, providing a more precise emissions estimate aligned with current economic conditions.

SIC Code	Total Value	Adjusted for Inflation	Co2e kg Defra	Co2e kg
10.7	£216.35	£196.39	0.56	109.98
10.8	£308.40	£280.00	0.797	223.16
11.07	£50.56	£45.46	0.565	25.68
13	£57.29	£51.82	0.783	40.58
17	£5,746.97	£5,224.30	0.805	4205.56
20.3	£1,911.04	£1,737.49	1.212	2105.84
20.4	£557.42	£506.00	0.834	422.00
20.5	£63.50	£57.00	0.599	34.14
21	£89.91	£80.92	0.24	19.42
22	£1,450.67	£1,318.35	0.769	1013.81
25	£288.77	£261.85	0.696	182.25
26	£39,029.00	£35,485.42	0.507	17991.11
27	£154.65	£140.00	0.942	131.88
31	£523.51	£475.51	0.516	245.36
32	£586.09	£532.79	0.704	375.08
46	£344.61	£312.77	3.895	1218.24
47	£4,662.99	£4,238.72	0.328	1390.30
62	£5,678.16	£5,162.47	0.118	609.17
23 other	£28.62	£25.46	1.763	44.89
70	£21,737.24	£19,763.42	0.118	2332.08
85	£3,639.71	£3,337.70	0.136	453.93
				33174.47

Uncertainties

Uncertainty in this category primarily arises from the use of spend-based data rather than direct activity data (e.g., actual material weights or lifecycle emissions). While the Defra SIC multiplier provides a robust and recognised methodology, variations in supplier practices, product composition, and embedded emissions introduce a degree of estimation risk. To reduce uncertainty in future reporting cycles, ACS plans to engage suppliers for more detailed emissions data and explore lifecycle-based reporting where feasible.

Emissions Category 5 Water and Waste Water

Emissions associated with waste and water were calculated using total water consumption data for ACS, sourced directly from company water bills. This approach ensures accuracy by relying on verified supplier data and aligns with recognised reporting methodologies for

Scope 3 emissions.

Water Supply	Total Usage	1074	cubic metres
	kg CO2e	164.44014	

Water Treatment	Total Usage	1074	cubic metres
	Waste Water calculated at 95% of usage	1020.3	cubic metres
	kg CO2e	189.510522	

Total kg CO2e	**353.950662**

Uncertainties

Uncertainty in this category is minimal, as water consumption figures were obtained directly from supplier invoices. However, minor estimation risk exists for waste-related emissions where assumptions may be required for waste composition or treatment methods. To further reduce uncertainty, ACS plans to enhance waste data collection through improved segregation reporting and supplier engagement.

Emissions Category 5.1 Emissions from Waste produced

Waste-related emissions were calculated using data from Biffa invoices, which confirmed that 156 x 1,100-litre waste bins were collected throughout 2024. Emission estimates were based on standard maximum capacity assumptions: 100 kg for general waste and 46 kg for mixed recycling. These figures were applied in line with recognised Defra conversion factors to ensure consistency and accuracy.

Types	Lifts	Bin	Weight	Total Weight	Ton Conversion	Calculation	Total kg CO2
General Waste	52 lifts	1100l	100kg	5200	5.2	497.24244	2585.660688
Recycling	104 lifts	1100l	46kg	4784	4.784	497.24244	2378.807833
Total	156 lifts						
							4964.84

Total CO2e 4964kg

Uncertainties

Uncertainty in this category primarily arises from the assumption that bins were collected at or near maximum capacity. Actual fill levels may vary, introducing a degree of estimation risk. Additionally, variations in waste composition could influence the emissions factor applied. To reduce uncertainty in future reporting cycles, ACS plans to implement improved waste tracking methods, such as weight-based reporting or supplier-provided tonnage data.

Emissions Category 6 Homeworking

Homeworking emissions were calculated based on each contracted employee's designated homeworking days and their standard working hours. This data was annualised by multiplying the total across 48 working weeks, providing a consistent and representative estimate of emissions associated with remote working.

Homeworkers	Days per week	Working hours	kg CO2e	kg CO2e per week	kg CO2e per year
Conrad Flerin	2	7	0.33378	4.67292	224.30016
Adam Blades	1	7	0.33378	2.33646	112.15008
Mike Blesic	1	7	0.33378	2.33646	112.15008
Tom Lowe	3	7	0.33378	7.00938	336.45024
Samantha Dwan	4	7	0.33378	9.34584	448.60032
Heidi Gregg	2	7	0.33378	4.67292	224.30016
Alistair Clay	5	7	0.33378	11.6823	560.7504
Andy Edwards	5	7	0.33378	11.6823	560.7504
Gemma Westwood	3	7	0.33378	7.00938	336.45024
Jayne Cooke	4	6	0.33378	8.01072	384.51456
Mel Young	4	6	0.33378	8.01072	384.51456
Jade Hampson	1	7	0.33378	2.33646	112.15008
Kellie Hand	2	7	0.33378	4.67292	224.30016
					4021.38144

Total kg CO2e	**4021.38**

Uncertainties

Uncertainty in this category primarily arises from assumptions regarding energy usage during homeworking. Variations in individual household energy efficiency, heating methods, and equipment use introduce a degree of estimation risk. While the methodology applies recognised emission factors, actual consumption may differ between employees. To reduce uncertainty in future reporting cycles, ACS plans to explore employee surveys or energy usage sampling to refine homeworking emission estimates.

8.0 Carbon Management Plan

ACS Group Sustainability Commitments – Pathway to Net Zero

ACS Group is committed to reducing its environmental impact through a structured three-year strategy aligned with our Pathway to Net Zero. This plan sets clear objectives, measurable targets, and actionable steps to ensure continual improvement and compliance with ISO 14064-1:2018.

Key Objectives and Targets

- **Overall Carbon Footprint Reduction**
  Achieve a **35% reduction in total greenhouse gas emissions** over the next three years through operational efficiencies, behavioural change, and supply chain engagement.

- **Scope 1 Emissions**
  Deliver an **80% reduction in direct emissions** by transitioning to a fully electric fleet, including the company van, significantly reducing reliance on fossil fuels.

- **Energy Procurement**
  ACS is currently under a fixed energy contract until **November 2026**. Ahead of renewal, we will engage with our provider to secure a **100% renewable energy supply**, ensuring alignment with our Net Zero pathway.

- **Scope 3 Emissions**
  Enhance reporting accuracy and transparency through improved data collection and supplier engagement. A comprehensive audit of supplier delivery vehicles will enable classification by fuel type (electric, petrol, diesel), supporting targeted reduction initiatives.

- **Business Commuting**
  Reduce commuting emissions through an **all-electric company car policy**, complemented by initiatives such as **'Walk to Work'**, **car-sharing schemes**, and improved tracking and reporting mechanisms.

Baseline and Monitoring

ACS has re-established **2024 (1 January – 31 December)** as the baseline year for emissions reporting, reflecting the inclusion of additional measurement categories and improved data accuracy. Progress will be monitored annually, with results reported transparently in line with ISO 14064-1 requirements.

Continuous Improvement

Our Carbon Management Plan is a living document, reviewed annually to incorporate technological advancements, regulatory changes, and stakeholder feedback. ACS is committed to embedding sustainability into every aspect of its operations, ensuring measurable progress towards Net Zero.

ACS Pathway to Net Zero – 3-Year Roadmap

2024 – Baseline & Foundations

- Establish 2024 as the baseline year
- Complete Scope 1, 2, and 3 emissions inventory
- Begin transition to electric fleet (pilot phase)
- Launch supplier audit for Scope 3 classification

2025 – Implementation & Acceleration

- Expand electric fleet to 70% of vehicles
- Introduce renewable energy procurement plan
- Implement car-share and “Walk to Work” initiatives
- Enhance Scope 3 reporting with supplier engagement.

2026 – Achievement & Review

- Achieve 80% reduction in **Scope 1** emissions
- Secure 100% renewable energy contract. **Scope 2.**
- Detailed analysis of vehicle usage within Scope 3. Reduction of Upstream transport and distribution by 25%. **Scope 3.**
- Deliver 35% overall emissions reduction. **Scope 1, 2 & 3**.
- Publish Net Zero progress report and set next targets.

2026 – Net Zero 2035

ACS Group will continue to advance along the Net Zero Pathway up to our target year of 2035 by maintaining alignment with the ISO-14064-1 standard for greenhouse gas quantification and reporting. Our approach includes annual re-baselining of emissions data, rigorous monitoring of progress against defined carbon reduction targets, and regular review of our Carbon Management Plan to ensure ongoing effectiveness. By adhering to internationally recognised best practices and engaging stakeholders throughout the process, ACS reaffirms its commitment to transparent, science-based action on climate change and the achievement of Net Zero by 2035.

Key Milestones: 2026–2035

Year	Milestone	Description
2026	**Full Scope 3 Mapping**	Complete mapping of all relevant Scope 3 categories, including upstream and downstream emissions. Begin supplier engagement programme to collect granular data.
2027	**Supplier Transition Audit**	First formal audit of supplier sustainability transitions. Evaluate progress on electric fleet adoption and low-carbon logistics .

Year	Milestone	Description
2028	**Midpoint Review & Adjustment**	Conduct a full Net Zero Pathway review. Adjust targets and strategies based on supplier performance, technology availability, and internal progress
2029	**Carbon Reduction Plan Audit**	BSI audit of ACS's emissions reduction plan against ISO Net Zero Guidelines (IWA 42). Confirm alignment with best practices and stakeholder expectations
2030	**Residual Emissions Strategy Finalised**	Define and document strategy for managing residual emissions, including offset quality standards and equity considerations
2031	**Reverification of Carbon Footprint**	Full re-verification of ACS's carbon footprint by BSI under ISO 14064-1. Update baseline if material changes have occurred
2032	**Sectoral Leadership Declaration**	Publicly declare ACS's sectoral leadership in sustainable business practices. Publish verified emissions reductions and stakeholder engagement outcomes
2033	**Final Supplier Compliance Check**	Ensure all key suppliers meet ACS's sustainability criteria. Conduct final audit of supply chain emissions and delivery practices .
2034	**Net Zero Readiness Audit**	BSI conducts final readiness audit. Confirm that ACS is prepared for Net Zero certification in 2035
2035	**Net Zero Verified Certification**	ACS receives the BSI Net Zero Verified Mark of Trust. Public disclosure of verified Net Zero status and long-term continuation strategy

Annexes

Biogenic Emissions

Biogenic carbon dioxide (CO2) emissions are defined as CO2 emissions related to the natural carbon cycle, as well as those resulting from the combustion, harvest, digestion, fermentation, decomposition, or processing of biologically based materials.

Business as Usual (BAU)

A future scenario where there have been no significant changes to policies, regulations, or attitude towards climate change, with climate change projected at over 4°C globally.

Carbon Dioxide Equivalent (CO2e)

The universal unit of measurement used to indicate the global warming potential of greenhouse gases (GHGs) expressed in the terms of the 100-year global warming potential of one metric ton of CO2.

Carbon Management Plan (CMP)

Plan for ACS's carbon reporting and management strategy.

Carbon Neutrality

Condition in which during a specified period the carbon emissions caused by a company are balanced out by an equivalent amount of carbon removed from the atmosphere.

Clean-in-place (CIP)

Method of cleaning the interior of equipment without disassembly.

Energy Attribute Certificates (EACs)

An audited kilowatt hour (kWh) credit from renewable electricity sources which proves the source of the electricity purchased.

Greenhouse Gas (GHG) Emissions

Emissions arising from business activities, which includes CO2, methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3).

Scope 1

Direct emissions from combustion of fuels at the site for business operations (i.e., natural gas heating, vehicle fuel).

Scope 2

Indirect emissions caused by a company's energy consumption that occur offsite (i.e., purchased electricity).

Scope 3

Indirect emissions from the value chain.

Power Purchase Agreement (PPA)

A contract for the purchase of power and associated Renewable Energy Certificates (RECs) from a specific renewable energy generator (the seller) to a purchaser of renewable electricity (the buyer). Physical PPAs, which are usually 10–20-year agreements, define all of the commercial terms for the sale of renewable electricity between the two parties, including when the project will begin commercial operation, schedule for delivery of electricity, penalties for under delivery, payment terms and termination. The project may be located onsite at the user's location or be offsite with the electricity being grid-delivered to the user.

Science Based Targets (SBTs)

Carbon emission reduction goals that are considered “science-based” if they show, through different emissions scenarios, that the goals are in line with the reduction pathways necessary to meet the goals of the Paris Agreement – to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

Zero Waste to Landfill (ZWL)

Eliminating waste through recycling and reusing with the prevention of waste ending up in landfill.