Board of Management

People and Culture Committee

Date of Meeting	**Wednesday 12 February 2025**
Paper No.	**PCC2-M**
Agenda Item	**6.4**
Subject of Paper	**Public Bodies Climate Change Duties Report 2023/24**
FOISA Status	**Disclosable**
Primary Contact	**Allison Miller**
Date of production	**21/01/2025**
Action	**For Noting**

1. Recommendations

1.1 To note, and discuss if required the college Annual Climate Change Return Report 2023/24 (Appendix 1) required under the Public Bodies Climate Change Duties (PBCCD)

2. Purpose

2.1 The purpose of this paper is to provide the Board with the information the college is required to submit through the statutory reporting framework for the public sector in relation to climate action.
2.2 The detailed requirements for reporting are outlined in P*art 4 of the Climate Change (Scotland) Act 2009.* This places specific duties on all public bodies relating to climate change, these duties commenced 1 January 2011 and state at section 44 that in exercising its functions a public body must act:

i) in the way best calculated to contribute to the delivery of Scotland's national emissions reduction targets (known as 'mitigation'). The current target is net zero by 2045 at the latest, and.
ii) in the way best calculated to help deliver Scotland's statutory climate change adaptation programme. The current programme runs 2024-29.

2.3 Within PBCCD (Scotland) Amendment Order 2020, reporting requirements means that the college must also provide:

- Target date for achieving zero direct emissions of greenhouse gases;
- Targets for reducing indirect emissions of greenhouse gases; and.
- How the institution will align its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets.

2.4 Updated statutory guidance for Scottish public bodies is due to be published for consultation in February/March 2025. It is fully anticipated that this will present an increased level of reporting, responsibility, action, and accountability going forward.

3. Consultation

3.1 Given the absence of a dedicated resource or specialist in the college, the Executive Leadership Team (ELT) approved the use of an external specialist to ensure compliance with our duties. We therefore engaged with Matt Woodthorpe, Scotland Programme Manager of the Environmental Association of Universities and Colleges (EAUC), the leading body for Sustainability in the post 16 Education sector in Scotland and Ireland.

The College is a member of EAUC.

3. Key insights from 2023/24 PBCCD report to Scottish Government

3.1 Areas of strength for the college*:*

- The College's reporting of emissions follows best practice standards for the Scottish public sector. The focus here should be on maintaining reporting quality.
- Total reported emissions for 2023/24 were 10,249 tonnes of CO2 equivalent (tCO2e) vs 9,879 tCO2e in 2022/23. The observed increase is due to emission conversion factors for the supply chain being increased this year and improved reporting quality of international student relocation emissions.
- Emissions reductions to date for scopes 1 and 2 have been strong – 36.8% and 54%, respectively, since 2015/16.
- Responsible procurement structures and actions are extraordinarily strong at the College and well reported within PBCCD reports.

- Case studies of embedding sustainability in the curriculum have been included for the first time within the “Wider Influence” section of the report.

3.2 Areas for improvement for the college; (noting Failure to meet the below actions will present a significant, reputational, and legal risk to the college)

- The College does not currently have a Climate Action Plan / Sustainability Action Plan to coordinate and drive strategic progress on sustainability issues.
- The College needs to determine its pathways to achieving zero direct emissions and get as close to net zero as possible for wider emission scopes. Other colleges in Scotland have undertaken feasibility studies to understand technological feasibility and associated costs. Reporting how the College is aligning its spending plans to meet net zero targets is a statutory expectation since 2022 which the College is not currently meeting.
- The College has not currently assessed future climatic risk to the college’s infrastructure, operations, and community. This work is a statutory expectation under the Climate Change (Scotland) Act 2009 (see above).
- The College does not currently have a Sustainable Travel Policy that can be referenced in the report.
- The College was unable to report business travel emissions from grey fleet cars for 2022/23. The College needs to reinstate monitoring of this emission source.
- The College will need to complete an updated staff and student commuting survey this semester to ensure quality emissions reporting of this source in November 2025’s report.
- Public communications on sustainability have not been updated since 2021. In addition to submitted PBCCD reports, Scottish Government expect public bodies to have transparent, accessible, and up to date emissions data on their own webpages.

5. Impact and Implication

5.1 In relation to Governance, the Board, ELT and SMT are expected understand the pathways, costs and changes needed to achieve zero direct emissions and net zero targets. Spending plans and use of resources should also be aligned to targets.

5.2 The Updated statutory guidance for Scottish public bodies is due to be published for consultation in February/March 2025. It is fully expected that This will present an increased level of responsibility, action, and accountability.

5.3 Environmental Standards Scotland and Audit Scotland are increasing scrutinising the public sector support and action in relation to statuary framework. In addition, the Scottish Funding Council (SFC) new outcomes Framework and Assurance model also has sustainability as a core area of focus.

APPENDIX 1

Public Bodies Climate Change Duties Compliance Reporting Academic Year Template 2023/24

1. Overview

This template is provided for public bodies required to report annually in accordance with the Climate Change (Duties of Public Bodies Reporting Requirements) (Scotland) Order 2015, as amended by the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 which took effect for reporting periods commencing on or after 1 April 2021.

Reports must be submitted to ccreporting@ed.ac.uk by 30th November. Late submissions will not be accepted for analysis and may be deemed non-compliant with Public Bodies Duties reporting requirements.

2. Guidance

1. Please do not delete any cells, rows or columns. This may corrupt the template/data and compromise analysis. You can hide any extra rows within tables.

2. Please complete the new "Boundary info" tab. This will enable improved assessment of data coverage and inform SSN analysis.

3. The "Profile of Body" tab must be completed before proceeding to add any other data.

4. To ensure that the correct emission factors are applied please ensure that you are using the correct template for the reporting year type under Q1f. If your organsiation reports according to the academic year, usually August to July, you must use the Academic Year template.

5. If you need to add more rows in any table please email the file to ccreporting@ed.ac.uk

6. In Q3b emissions sources can be filtered by type in Column C. The list of available factors is visble on the Emission Factors tab. Please do not edit this list, use "other" if an EF is not available.

7. Only use the "other" rows when there is no relevant emission source available in the dropdown list or if you have bespoke data/emission factors. Please provide a brief explanation in the comment.

8. Water supply and treatment (sewage) emission factors are based on Scottish Water's carbon intensities for service supply. If you wish to use UK factors you need to enter manually in an "Other" row.

9. More detailed guidance is available on the SSN website

3. Colour Coding used in the template

	Dropdown box - select from list of options
	Uneditable/fixed entry cell
	Editable cell

Public Bodies Climate Change Duties Compliance Reporting Template 2023/24 AY

Please answer all questions below with respect to the public body's reporting boundary for the reporting period.
The information is intended to improve data coverage and inform analysis, in particular, to help identify data gaps.
There are 3 response options:

YES - where data is available and is reported
NA - where a category is relevant but no data is available
NO - the category is not relevant

Any points of clarification can be added in the comments field for the corresponding emission source(s) in Table 3b on the Emissions tab.

Category		Select from dropdown list
Owned estate	Are any buildings owned by the public body?	Yes
Managed services	Are building services managed on behalf of another public body that shares or leases space?	No
Leased premises -public	Are building services managed and provided by another public body?	No
Leased premises - private	Are building services managed and provided by a private landlord?	Yes
Streetlighting	Are streetlights owned or operated?	Yes
Fleet and equipment	Are any vehicles or fossil-fueled machinery or equipment owned or leased, excludes short-term or infrequent hires?	Yes
Refrigerants/F-gases	Are there any air conditioning or refrigeration systems that require refrigerant gas top-ups?	Yes
Medical gases	Are medical gases used?	No
Business travel - private	Do staff undertake business travel by private car?	Yes
Business travel - flights	Do staff undertake any business travel by plane?	Yes
Homeworking	Do staff work from home - including hybrid?	Yes
Supply chain	Are any goods or services purchased?	Yes
Land use	Are more than 10 hectares of land owned or managed for public services provision, including for research or recreation?	No
Waste services	Is the public body responsible for collecting household or municipal waste?	Yes

Public Sector Report on Compliance with Climate Change Duties 2024 Template AY

PART 1 Profile of Reporting Body

1a Name of reporting body

Provide the name of the listed body (the "body") which prepared this report.

City of Glasgow College

1b Type of body

Select from the options below

Educational Institution

1c Highest number of full-time equivalent staff in the body during the report year

963

1d Metrics used by the body

Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.

Metric	Units	Value	Comments
Floor area	m2	68245.00	
Number of full-time equivalent students	number FTS	13011.00	
Other (please specify in comments)			

1e Overall budget of the body

Specify approximate £/annum for the report year.

Budget	Budget Comments
£92,371,000	Total income including grants, tuition fees, investment income,etc.

1f Report type

Check the report year type is correct. The alternative template must be used for academic year reporting.

Reporting type	Report year comments
Academic	01/08/2023 - 31/07/2024

1g Context

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

City of Glasgow College is Scotland’s largest technological and professional skills college, with two campuses located within the city centre of Glasgow: City Campus and Riverside Campus. Since its multi-college merger in 2010, the college has enabled over 100,000 graduates to acquire recognised qualifications, engaging with employers, business, industry and education partners to build a curriculum of over 1,200 flexible-study courses across four faculties: Creative Industries; Education and Humanities; Hospitality and Leisure; and, Nautical and STEM. The College has a student and staff population of approximately 13,000 FTE students (including 558 international students) and 963 FTE staff.

The College also operates the Charles Oakley building as well but this is currently empty.

Public Sector Report on Compliance with Climate Change Duties 2024 Template AY

PART 2 Governance, Management and Strategy

Governance and management

2a How is climate change governed in the body?

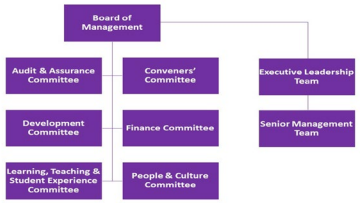
Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements. Provide a diagram / chart to outline the governance structure within the body.

The Board is the governing body of City of Glasgow College and is responsible for:
- Leading the College and setting its strategic direction and values.
- Ensuring effective management and financial controls to support the student experience within a framework of public accountability and transparency.
- Delivering high-quality learning and outcomes.

The Board's membership and biographies of all external members and College members including the Principal is publicly available via www.cityofglasgowcollege.ac.uk/about-us/board-and-governance/meet-our-board.

The College Executive Team support the Board and manage all aspects of day-to-day activity and operation of the College.

The Finance and Physical Resources Committee monitors delivery of the Sustainability Strategy and the Audit and Assurance Committee completed an internal audit in May 2023 on environmental sustainability focussed on the controls in place to mitigate "Failure of compliance with Environmental, Social and Governance (ESG) duties" as reference in the City of Glasgow College Strategic Risk Register. This risk is described as:



2b How is climate change action managed and embedded in the body?

Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, departmental heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body. Provide a diagram to show how responsibility is allocated to the body's senior staff, departmental heads etc.

Climate change action is embedded and actioned through staff roles and organisational structures. The Joint Utilities Working Group (JUWG) and Environmental Sustainability Working Group (ESWG) lead and coordinate the College's approach to tackling climate change. Members of these groups includes:

JUWG:
Head of Finance
Head of FES-group
Associate Director - Facilities, Front of House & Reception

Strategy

2c Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?

Provide a brief summary of objectives if they exist.

Wording of objective	Name of document	Document Link
Through efficiency and planned change we will address the impact of the climate emergency on industry and society.	Strategic Plan 2021-30	https://view.pagetiger.com/strategic-plan-21-30/v1
Our aim is to support sustainable productivity and clean industry via a developed curriculum, including support for renewable energy and industrial biotechnology.	Strategic Plan 2021-30	https://view.pagetiger.com/strategic-plan-21-30/v1
The College will implement a green action plan, including a renewed travel policy, with direct impact on our environmental footprint. We will seek to influence as an environmentally responsible civic lead organisation. The travel policy will consider safety concerns as a priority. City of Glasgow College will be an ethical consumer with a (net) zero carbon emissions target in the short-term.	Strategic Plan 2021-30	https://view.pagetiger.com/strategic-plan-21-30/v1

2d Does the body have a climate change plan or strategy?

If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.

The Sustainability Strategy 2021-30 was launched in 2021.

This can be accessed via: www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf

2e Does the body have any plans or strategies covering the following areas that include climate change?

Provide the name of any such document and the timeframe covered.

Topic area	Name of document	Link	Time period covered	Comments
Adaptation	N/A	N/A	N/A	

Business travel	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	Updated travel strategy to be developed 2024/25
Staff Travel	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	Updated travel strategy to be developed 2024/25
Energy efficiency	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Fleet transport	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	Updated travel strategy to be developed 2024/25
ICT	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Renewable energy	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Sustainable/renewable heat	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Waste management	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Water and sewerage	Strategic Plan Sustainability Strategy	https://view.pagetiger.com/strategic-plan-21-30/v1 https://www.cityofglasgowcollege.ac.uk/sites/default/files/Sustainability%20Strategy%202021.pdf	2021-30 2021-30	
Land Use				
Other (please specify in comments)				

2f **What are the body's top 5 priorities for climate change governance, management and strategy for the year ahead?**

Provide a brief summary of the body's areas and activities of focus for the year ahead.

1) Review staffing provision for operational environmental sustainability and access to wider expertise and communication relating to staff body, student body, internal governance and external stakeholders
2) Develop and publish Sustainability / Climate Action Plan
3) Complete Climate Risk Register and Action Plan from EAUC Scotland
4) Develop and publish updated sustainable travel strategy

Further strategic actions to emerge based on the actions undertaken above.

2g **Has the body used the Climate Change Assessment Tool (a) or equivalent tool to self-assess its capability / performance?**

If yes, please provide details of the key findings and resultant action taken.

(a) This refers to the tool developed by Resource Efficient Scotland for self-assessing an organisation's capability / performance in relation to climate change.

No

Further information

2h **Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

Public Sector Report on Compliance with Climate Change Duties 2024 Template AY

PART 3 Corporate Emissions, Targets and Project Data

Emissions

3a **Emissions from the start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year**

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint / management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1 & 2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b). If data is not available for any year from the start of the baseline year to the end of the report year, provide an explanation in the comments column.

(a) No information is required on the effect of the body on emissions which are not from its estate and operations.

(b) This refers to "The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition)", World Business Council for Sustainable Development, Geneva, Switzerland / World Resources Institute, Washington DC, USA (2004), ISBN: 1-56973-568-9.

SELECT APPROPRIATE BASELINE YEAR. TOTAL EMISSIONS IN THE MOST RECENT FOOTPRINT YEAR IN THIS QUESTION SHOULD EQUAL TOTAL EMISSIONS IN Q3B

Reference year	Year	Year type	Scope 1	Scope 2	Scope 3	Total	Units	Comments
Baseline Year	2015/16	Academic	2,665.00	3,199.00	45.00	5,909.00	tCO_2e	
Year 1 carbon footprint	2016/17	Academic	2,331.00	2,568.00	683.00	5,582.00	tCO_2e	
Year 2 carbon footprint	2017/18	Academic	2,409.00	2,305.00	570.00	5,284.00	tCO_2e	
Year 3 carbon footprint	2018/19	Academic	2,314.00	2,000.00	382.00	4,596.00	tCO_2e	
Year 4 carbon footprint	2019/20	Academic	2,186.00	1,531.00	247.00	3,964.00	tCO_2e	
Year 5 carbon footprint	2020/21	Academic	2,152.00	1,112.00	675.00	3,939.00	tCO_2e	
Year 6 carbon footprint	2021/22	Academic	2,289.10	1,313.00	1,278.30	4,880.40	tCO_2e	
Year 7 carbon footprint	2022/23	Academic	1,899.16	1,439.22	6,540.59	9,878.88	tCO_2e	International student relocation emissions were inputted incorrectly for 22/23 with the wrong conversion factors; raw data for student numbers and nationality available for 83% of total international student body and this has been used to update scope 3 and total reported emissions. This has increased scope 3 and total reported emissions for 22/23 by 1,435.49tCO2e.
Year 8 carbon footprint	2023/24	Academic	1,683.65	1,472.26	7,093.35	10,249.26	tCO_2e	

3b **Breakdown of emissions sources** Please refrain from deletine rows or columns anywhere in this temalate. This workbook is password protected to prevent this and should not be unlocked.

Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If there is no data consumption available for an emission source enter the emissions in kgCO2e in the 'Consumption' column of one of the "Other" rows and assign the scope and an emission factor of 1.

(a) Emissions factors are published annually by the UK Department for Energy Security & Net Zero

Emission Factor Year 2024

You can filter emission sources by "type" in column C to enable quicker selection of emission source in column D. See the list in the Emissions Tab.
User defined emission sources can be entered in rows 131 onwards. Please only use these if you cannot find a relevant emission source in the dropdown list or you have a bespoke emission factor or non-standard derivation of emissions e.g. based on a survey/consumption data. If you require extra rows in the table please send the template to ccreporting@ed.ac.uk.

Emission Type	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO_2e)	Comments
Fuels	Natural gas	Scope 1	8,646,810	kWh	0.18290	kg CO2e/kWh	1581.50157	Based on metered data
Fuels	Marine gas oil	Scope 1	294	litres	2.77139	kg CO2e/litres	0.81154	Based on invoices
Fuels	Gas oil	Scope 1	81	litres	2.75541	kg CO2e/litres	0.22870	Based on invoices
Fuels	Diesel (average biofuel blend)	Scope 1	200	litres	2.51279	kg CO2e/litres	0.50256	Based on invoices
Refrigerants	R410A	Scope 1	47	kg	1924.00000	kg CO2e/kg	89.85080	Based on log books from suppliers
Electricity	Electricity: UK	Scope 2	7,110,666	kWh	0.20705	kg CO2e/kWh	1472.26340	Based on metered data
Electricity	Transmission and distribution - Electricity: UK	Scope 3	7,110,666	kWh	0.01830	kg CO2e/kWh	130.12519	Based on metered data
Water	Water supply	Scope 3	38,200	cubic metres	0.10000	kg CO2e/cubic metres	3.82000	Based on metered data
Water	Water treatment	Scope 3	36,874	cubic metres	0.19000	kg CO2e/cubic metres	7.00595	Based on 95% of metered data + rainwater ha
Waste	Plastics: PET (incl. forming) - Recycled	Scope 3	18.64	tonnes	6.41061	kg CO2e/tonnes	0.11948	Data provided by Enva (waste management c
Waste	Organic food and drink waste - Anaerobic digestion	Scope 3	11.54	tonnes	8.88386	kg CO2e/tonnes	0.10250	Data provided by Enva (waste management c
Waste	Average construction - Recycled	Scope 3	118.42	tonnes	0.98485	kg CO2e/tonnes	0.11663	Data provided by Enva (waste management c
Waste	Metal: scrap metal - Recycled	Scope 3	7.68	tonnes	6.41061	kg CO2e/tonnes	0.04923	Data provided by Enva (waste management c
Waste	Paper and board: paper - Recycled	Scope 3	6.948	tonnes	6.41061	kg CO2e/tonnes	0.04454	Data provided by Enva (waste management c
Waste	WEEE - mixed - Recycled	Scope 3	0	tonnes	6.41061	kg CO2e/tonnes	0.00000	Data provided by Enva (waste management c Please state in comments if this value is 0 because no emissions exist or if emissions likely exist, but are unknown
Waste	Commercial and industrial waste - Combustion	Scope 3	115.84	tonnes	6.41061	kg CO2e/tonnes	0.74261	Data provided by Enva (waste management c
Waste	Glass - Recycled	Scope 3	0.3	tonnes	6.41061	kg CO2e/tonnes	0.00192	Data provided by Enva (waste management c
Waste	Wood - Recycled	Scope 3	24.78	tonnes	6.41061	kg CO2e/tonnes	0.15885	Data provided by Enva (waste management c
Waste	Mixed dry recyclates - Recycled	Scope 3	6.08	tonnes	6.41061	kg CO2e/tonnes	0.03898	"Other Waste" - data orovided by Enva (waste
Transport - public	National rail	Scope 3	2,214,299	passenger.km	0.03546	kg CO2e/passenger.km	78.51904	Staff commutine - based on staff survey comp
Transport - public	Local bus (not London)	Scope 3	657,477	passenger.km	0.12999	kg CO2e/passenger.km	85.46544	Staff commutine - based on staff survey comp
Transport - car	Average car - Unknown	Scope 3	2,012,279	km	0.16601	kg CO2e/km	333.86949	Staff commutine - based on staff survey comp
Transport - public	Light rail and tram	Scope 3	70,474	passenger.km	0.02860	kg CO2e/passenger.km	2.01556	Staff commutine - based on staff survey comp
Transport - car	Motorbike - Average	Scope 3	20,015	km	0.11367	kg CO2e/km	2.27513	Staff commutine - based on staff survey comp
Transport - public	National rail	Scope 3	4,188,901	passenger.km	0.03546	kg CO2e/passenger.km	148.53843	Student commutine - based on student survey
Transport - public	Local bus (not London)	Scope 3	979,297	passenger.km	0.12999	kg CO2e/passenger.km	127.29282	Student commutine - based on student survey
Transport - car	Average car - Unknown	Scope 3	2,162,066	km	0.16601	kg CO2e/km	360.87044	Student commutine - based on student survey
Transport - public	Light rail and tram	Scope 3	86,367	passenger.km	0.02860	kg CO2e/passenger.km	2.47010	Student commutine - based on student survey
Transport - car	Motorbike - Average	Scope 3	84,321	km	0.11367	kg CO2e/km	9.58477	Student commutine - based on student survey
Transport - public	Black cab	Scope 3	72,270	km	0.30603	kg CO2e/km	22.26980	Student commutine - based on student survey
Air	Flights - Domestic, to/from UK - Average passenger	Scope 3	21,691	passenger.km	0.27257	kg CO2e/passenger.km	5.91286	Business travel - distance data supplied by co
Air	Flights - Short-haul, to/from UK - Economy class	Scope 3	83,873	passenger.km	0.18287	kg CO2e/passenger.km	15.33786	Business travel - distance data supplied by co
Air	Flights - Long-haul, to/from UK - Economy class	Scope 3	229,966	passenger.km	0.20051	kg CO2e/passenger.km	46.01850	Business travel - distance data supplied by co
Air	Flights - International, to/from non-UK - Economy class	Scope 3	161,644	passenger.km	0.13465	kg CO2e/passenger.km	21.76536	Business travel - distance data supplied by co
Transport - public	National rail	Scope 3	55,669	passenger.km	0.03546	kg CO2e/passenger.km	1.97402	Business travel - distance data supplied by co
Hotel stay	Hotel stay - UK	Scope 3	97	Room per night	10.40000	kg CO2e/Room per night	1.00880	Business hotel stays - data supplied by college
Hotel stay	Hotel stay - UK (London)	Scope 3	24	Room per night	11.50000	kg CO2e/Room per night	0.27600	Business hotel stays - data supplied by college
Homeworking	Homeworking (office equipment + heating)	Scope 3	191,655	FTE Working Hour	0.33378	kg CO2e/FTE Working Hour	63.97061	Estimation
Other	Other (please specify in comments)	Scope 1					10.748	F-gas R449A top up (7.5kg) and conversion fa
Other	Other (please specify in comments)	Scope 3					1,661.680	International student relocation emissions ba
Other	Other (please specify in comments)	Scope 3					1.144	Business international hotel stays (76 nights)
Other	Other (please specify in comments)	Please select from drop down box					3,954.756	Scope 3 supply chain emissions derived from
Other	Other (please specify in comments)	Please select from drop down box						
							10,249.256	

3c **Generation, consumption and export of renewable energy**

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

	Renewable Electricity		Renewable Heat		
Technology	Total consumed by the body (kWh)	Total exported (kWh)	Total consumed by the body (kWh)	Total exported (kWh)	Comments
Solar PV	40,081				The reported figure is significantly lower than last year due to a fault with the solar meter at City Campus which meant it wasn't reporting data for the period April - July 2024, despite generating electricity.
Solar thermal			6,892		The reported figure is significantly lower than last year due to a fault with the solar meter at City Campus which meant it wasn't reporting data for the period October 2023- July 2024, despite generating thermal energy.

Targets

3d **Organisational targets**

List all of the body's targets of relevance to its climate change duties. Where applicable, targets for reducing indirect emissions of greenhouse gases, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included. Where applicable, you should also provide the body's target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets.

Name of target	Type of target	Target	Units	Boundary/scope of target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Progress against target	Comments
Greenhouse Gas Emissions	Absolute	Net Zero by 2040	tCO2e reduction	All emissions	2015/16	5,909	tCO2e	2039/40	10,249	73% increase in total reported emissions between 2015/16 - 2023/24 due to capture of additional scopes 1 and 3 emissions, including scope 3 supply chain emissions and international student relocation emissions.
Reduce electrical consumption	Percentage	1% per annum	KWh reduction	Energy use in buildings	2018/19	7,824,066	kWh	2022/23	7,110,666	9% reduction in electricity use 2018/19 - 2023/24.
Reduce gas consumption	Percentage	1% per annum	KWh reduction	Energy use in buildings	2018/19	11,587,715	kWh	2022/23	8,646,810	25% reduction in natural gas use 2018/18 - 2023/24 achieved through building management optimisation and reduced catering activity.
Reduce water consumption	Percentage	1% per annum	M3 reduction	Water and sewerage	2019/20	33,650	M3	2022/23	38,200	14% increase in water use 2019/20 - 2023/24 partially due to fault with rain water harvesting system.
Reduce waste	Percentage	2% per annum	tonnes reduction	Waste	2018/19	584	tonnes	2022/23	310	47% reduction in waste generation 2018/19 - 2022/23. 13% between 2022/23 - 2023/24.

3da **How will the body align its spending plans and use of resources to contribute to reducing emissions and delivering its emission reduction targets?**

Provide any relevant supporting information that is not already included elsewhere in this report.

Glasgow Learning Quarter (GLQ) through the Non Profit Distribution (NPD) contract, will support the College in its Net Zero targets and responsibilities, working in a pragmatic and collaborative manner whilst making the best of opportunities available within the contractual framework. GLQ is committed to facilitating a positive outcome for the College, GLQ and its investors, lenders and supply chain. Through the Glasgow Colleges Regional Board, the College has had access to their Environment and Sustainability Project Manager for additional staff capacity on sustainability. In addition, the College has enabled time and resource to support training, reskilling and CPD of key members of staff in relation to sustainability.

3db **How will the body publish, or otherwise make available, it's progress towards achieving its emissions reduction targets?**

Provide any other relevant supporting information. In the event that the body wishes to refer to information already publshed, provide information about where the publication can be accessed.

Simply referencing this report or it's availabilty on the SSN website is insufficient information.

Following this report submission the college is currently updating its public sustainability pages - these can be accessed via www.cityofglasgowcollege.ac.uk/sustainability and updated information will be available by the end of January 2025.

Projects and changes

3e **Estimated total annual carbon savings from all projects implemented by the body in the report year**

If no projects were implemented against an emissions source, enter "0".
If the body does not have any information for an emissions source, enter “Unknown”.
If the body does not include the emissions source in its carbon footprint, enter “N/A”.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity		Illuminated internal signage at City fitted with LEDs to reduce power requirements. Unknown emission saving.
Natural gas		All Heating set-points changed from 21°C – 20°C. Boiler plant LTHW circulation temperature reduced from 84°C to 80°C during months of mild weather. Unknown emission savings.
Other heating fuels		
Waste		
Water and sewerage		Rainwater harvesting system repaired. Unknown emissions saving.
Travel		
Fleet transport		
Other (please specify in comments)		
Please select from drop down box		
Total	-	

3f **Detail the top 10 carbon reduction projects to be carried out by the body in the report year**

Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.

Project name	Funding source	First full year of CO_2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO_2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	
		Please select from drop down box	Please select from drop down box				Please select from drop down box			Please select from dropdown box	

3g **Estimated decrease or increase in the body’s emissions attributed to factors (not reported elsewhere in this form) in the report year**

If the emissions increased or decreased due to any such factor in the report year, provide an estimate of the amount and direction

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Please select from drop down box	No significant changes
Service provision		Please select from drop down box	No significant changes
Staff numbers		Please select from drop down box	No significant changes
Other (please specify in comments)		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Total		-	

3h **Anticipated annual carbon savings from all projects implemented by the body in the year ahead**

If no projects are expected to be implemented against an emissions source, enter “0”.
If the organisation does not have any information for an emissions source, enter “Unknown”.
If the organisation does not include the emissions source in its carbon footprint, enter “N/A”.

Emissions source	Total estimated annual carbon savings (tCO_2e)	Comments
Electricity		The College plans to invest in the lifecycle upgrade of more fluorescent lights to LED lights to reduce power requirements. Unknown emissions savings.
Natural gas		
Other heating fuels		
Waste		Rocket composter repaired to allow for food composting onsite again. Unknown emission savings.
Water and sewerage		
Travel		
Fleet Transport		
Other (please specify in comments)		
Please select from drop down box		
Total	-	

3i **Estimated decrease or increase in emissions from other sources in the year ahead**

If the body’s corporate emissions are likely to increase or decrease for any other reason in the year ahead, provide an estimate of the amount and direction.

Emissions source	Total estimated annual emissions (tCO_2e)	Increase or decrease in emissions	Comments
Estate changes		Please select from drop down box	No significant changes
Service provision		Please select from drop down box	No significant changes
Staff numbers		Please select from drop down box	No significant changes
Other (please specify in comments)		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Please select from drop down box		Please select from drop down box	
Total		-	

3j **Total carbon reduction project savings since the start of the year which the body used as a baseline for its carbon footprint**

If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").

Total savings	Total estimated emissions savings (tCO_2e)	Comments
Total project savings since baseline year		

Further information

3k **Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to corporate emissions, targets and projects.

Public Sector Report on Compliance with Climate Change Duties 2024 Template

PART 4 **Adaptation - please do not include information in this part on measures that solely reduce emissions with no implications for climate adaptation. These are climate mitigation measures which should be reported in the Emissions tab.**

Assessing and managing risk

4a **Has the body assessed current and future climate-related risks?**
If yes, provide a reference or link to any such risk assessment(s).

The latest climate risk assessments for City Campus and Riverside Campus were completed June 2024 by the Associate Director - Facilities, Front of House & Reception. Assessed current climate risks include:
- snow
- high wind
- heavy rainfall and flooding
- high indoor temperatures
- drought

The risk assessments can be provided on request.

No future climate risk assessments have been completed to date.

4b **What arrangements does the body have in place to manage climate-related risks?**
Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.

Existing controls exist for all of the identified current climate risks.

Established risk management and adaptation actions include:
Hazard - *control*

SNOW: Blocked Fire exit doors due to heavy snowfall - *Regular inspections to determine if snow can be manually cleared. If it cannot, building should be closed, and communication sent to all staff/students informing this.*

SNOW: Access to Campus and car parks may be affected due to snow and ice - *Gritting contract is in place and all areas would be treated based on weather reports. Concierge have snow clearing equipment and access to salt/grit and, would be able to assist if required.*

SNOW: Heavy snowfall on roofs could affect plant equipment. Thawing snow on roofs may cause flooding - *FES-FM carry out regular planned preventative maintenance on plant equipment and drainage systems including gutters and ensure any blockages such as leaves are removed. If essential plant is unavailable the building may not be suitable for opening and a communication should be sent to all staff/students.*

Taking action

4c **What action has the body taken to adapt to climate change?**
Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action. The body may wish to make reference to the Scottish Climate Change Adaptation Programme ("the Programme").

The controls detailed in 4b demonstrate most of the actions taken to date by the College to adapt to climate change. In addition, the College has repaired its rainwater harvesting system over the past year, reducing localised flood risks following precipitation events.

4d **Where applicable, what contribution has the body made to helping deliver the Programme?**
Provide any other relevant supporting information

Sub-outcome 1.1.2 Empowered Communities and 1.2.1.1 Community Planning: - action aligned to these sub-outcome areas include **add active travel support offer/infrastructure**; and, temporary accommodation being provided in the Halls of Residence for any staff stranded on Campus during a climatic event.

Sub-outcome 3.3.2 Expertise (Skills and Services): - the College is piloting new Next-Gen Higher National Qualifications from SQA which provide opportunities to develop knowledge and understanding of learning for sustainability. Piloted courses for 2023/24 were HND Accounting and HND Radio. This has been expanded to 6 qualifications in 2024/25 pilot.

Sub-outcome 4.2.2 Water: - The College has repaired it's water harvesting system at City Campus and therefore supporting reduced stormflows to the local drainage network during rain and snowmelt events. **The College also runs a rainwater harvesting system at its Riverside Campus**.

Review, monitoring and evaluation

4e **What arrangements does the body have in place to review current and future climate risks?**
Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

The latest climate risk assessments for City Campus and Riverside Campus were completed June 2024 by the Associate Director - Facilities, Front of House & Reception. These are reviewed annually and are signed off by the People and Culture Committee.

4f **What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?**
Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).

Nothing in place currently linked back to the climate risk register and control actions.

Future priorities for adaptation

4g **What are the body's top 5 climate change adaptation priorities for the year ahead?**
Provide a summary of the areas and activities of focus for the year ahead.

The College recognises the need for a more comprehensive and proactive approach to understanding future climate risk, its impact on college infrastructure, processes and communities, and the opportunities for adaptation. The College will complete EAUC Scotland's Climate Risk Register and Action Plan to assess and respond to current and future climate risks. Based on the outcomes of this work further strategic adaptation priorities will emerge.

Further information

4h **Supporting information and best practice**
Provide any other relevant supporting information and any examples of best practice by the body in relation to adaption.

Public Sector Report on Compliance with Climate Change Duties 2024 Template

PART 5 Procurement

5a How have procurement policies contributed to compliance with climate change duties?

Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.

The College ensures compliance with the Procurement Reform (Scotland) Act 2014 aligning it with our strategic outcomes as detailed in the College's Procurement Strategy 2022 – 2026. The strategy can be accessed via www.cityofglasgowcollege.ac.uk/sites/default/files/CoGC%20Procurement%20Strategy%202022%20-%202026%20v3.1.pdf. A key element of the legislation requires the College to meet the Sustainable Procurement Duty and this is set out in the strategy:

Policy Area: "Ensuring that our regulated procurements will be carried out in compliance with the sustainable procurement duty and to support sustainable economic recovery"
College approach: "The College will undertake regulated procurements in compliance with the sustainable procurement duty. It will also seek to take account of climate and circular economy in its procurement activity. Consideration of environmental, social and economic issues and how benefits can be delivered through the procurement will be made, where appropriate and on a contract-by-contract basis. The College will utilise available tools and systems such as Scottish Government Procurement Tools, Climate Change Actions Plans (FNT2030), and Electronics Watch where relevant and proportionate to the scope of the procurement.

The College published its Modern Slavery and Human Trafficking Statement and reviews it annually to comply with the Modern Slavery Act 2015."

Policy area: "Contribution to the global climate emergency response – and report progress in their annual procurement report"
College approach: "In response to the global climate emergency the College will align corporate commitments to work towards net zero greenhouse gas emissions framework agreements wherever possible.

The College has a strong focus on supporting responsible procurement, in particular on climate and circular economy. The College will seek to support circular economy and promote strategic decisions on demand management and procuring for re use, re design and remanufacture. It will prioritise where greatest impact can be made.

The College will seek to monitor and report progress through the annual procurement report and the Public Bodies Climate Change Duties (PBCCD) Annual Report."

Within our newly revised Procurement Policy we make a commitment to climate and circular economy ambitions to improve environmental wellbeing. To assist in this commitment Procurement staff together with the internal stakeholders:
• Leverage buying power when buying goods, services or works, to champion innovation, future-proofed solutions; enabling businesses and the Third Sector to engage in supporting our climate ambitions to deliver against our climate targets. By working with markets, we stimulate the development of circular economy and low emission supply chains and solutions, including through procuring for re use, re design and remanufacture.
• Work collaboratively across departments to align climate-related policies, targets, milestones and supporting activities.
• Be climate literate and to have an appreciation of how contracting activity can support net-zero aims for the College and Scotland as a whole. Capturing and driving opportunities to contribute to climate change ambitions through procurement activity.

The College produces a report on progress against these objectives annually and publish this on the College's website: www.cityofglasgowcollege.ac.uk/about-us/procurement-and-tenders. The College's Pricurement Strategy 2022 - 2026 is reviewed annual by the Head of Procurement. In December 2023 the Procurement Action Plan was embedded within the strategy.

5b How has procurement activity contributed to compliance with climate change duties?

Provide information relating to how procurement activity by the body has contributed to its compliance with climate changes duties.

The College's Annual Procurement Report provides an update of climate change progress. This can be found on pg 11 section 3.2 of the report, accessed via www.cityofglasgowcollege.ac.uk/about-us/procurement-and-tenders.

Below are examples of how the above policies have resulted in procurement activities that contributes to compliance with climate change duties:

Climate Change and Sustainable Purchasing elearning Module:
Access via https://360.articulate.com/review/content/6b71bd2a-b549-400f-b8ef-4f810d48b5c1/review

Approach: The creation of our Climate Change Awareness eLearning Module, this is a bolt on to our live Procurement Awareness Module. This new addition contains the following learning outcomes: What is Climate Change; CoGC's target to achieve Net Zero by 2040; Our roles in promoting sustainable practises; Circular Economy; and Progress we have made so far.

Intended Benefits: The aim of this eLearning Module is to raise awareness with purchasers on the impacts caused to the environment through our supply chain. The intended benefits is to encourage purchasers to adopt more sustainable and responsible buying practises, educate them on climate change and help them understand their contribution to achieving net zero by 2040. The eLearning Module will be hosted the College new Learner Experience Platform and will target all employees involved in the purchasing process from faculty admin assistance to our Executive Leadership Team.

Measurable Benefits Created and Achieved: The performance measures which will be aligned to the eLearning Module will be as follows - increased environmental outcomes embedded within contract, reduction of scope 3 emission, increased recycling and reuse initiatives. As this eLearning Module has not yet been launched we do not have evidence of achieved benefits however we believe the input to this project to date and the collaboration involved should not go unnoticed.

Further information

5c Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to procurement.

Public Sector Report on Compliance with Climate Change Duties 2024 Template

PART 6 Validation and Declaration

6a Internal validation process

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

Matt Woodthorpe, Scotland Programme Manager for EAUC acted as Project Lead in coordinating data compilation for the creation of this report on behalf of City of Glasgow College. The report was shared and reviewed by members of the College's Environmental Sustainability Working Group (ESWG) and Senior Management Team ahead of approval.

6b Peer validation process

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

The College took part in EAUC Scotland's PBCCD Group Peer Review held on the 6th November 2024.

6c External validation process

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

N/A

6d No Validation Process

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

N/A

6e Declaration

I confirm that the information in this report is accurate and provides a fair representation of the body's performance in relation to climate change.

Name:	John Gribben
Role in the body:	Vice Principal People and Corporate Support
Date:	25/11/2024 **Date in format (dd/mm/yyyy)**

Recommended Reporting: Reporting on Wider Influence

Wider Impact and Influence on GHG Emissions

Q11) Historic Emissions (Local Authorities Only)

Please indicate emission amounts and unit of measurement (e.g. tCO2.e? and years. Please provide information on the followwing components using data from the links provided below. Please use t1) as the default unless tweets and actions relate to t2).
Please note - territorial emissions of carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O) are provided, but not fluorinated gases, which are also included in the UK territorial/greenhouse gas emissions statistics. Prior to the 2005 to 2018 publication the statistics covered emissions of carbon dioxide only
t1) UK local and regional CO2e emissions: **subset dataset** (emissions within the scope of influence of local authorities)
t2) UK local and national CO2e emissions: **full dataset**

https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions-of-carbon-dioxide-for-local-authority-areas

Local Authority (Please State)	Please select from drop down box
DEFRA2 Dataset (full or sub-set)	Please select from drop down box

Source	Sector	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Units	Comments
DEFRA2 Sectors	Total Emissions	-		-	-	-	-	-	-	-	-	-		kt CO2e	
	Industry and Commercial													kt CO2e	
	Domestic													kt CO2e	
	Transport total													kt CO2e	
	Per Capita													tonnes CO2e	
Other Sectors	Please select from drop down box													Please select from drop down box	
	Please select from drop down box													Please select from drop down box	
	Please select from drop down box													Please select from drop down box	
	Please select from drop down box													Please select from drop down box	
	Please select from drop down box													Please select from drop down box	
	Please select from drop down box													Please select from drop down box	

Jul Towns
Please detail your wider influence targets

Sector	Description	Type of Target (units)	Baseline value	Start year	Target	Target/End year	Saving in latest year measured	Latest Year Measured	Comments
Please select from drop down box		Please select from drop down box		Please select from drop down box		Please select from drop down box		Please select from drop down box	

Factors by Category

	Category					
Scope	Level 1	Level 2	Level 3	UOM	GHG Conversion Factor 2023 (kgCO2e/unit)	GHG Conversion Factor 2024 (kgCO2e/unit)
Scope 1	Bioenergy	Biogas	Biogas	kWh	0.00022	0.00023
Scope 1	Bioenergy	Biogas	Biogas	tonnes	1.23595	1.26431
Scope 1	Bioenergy	Biogas	Landfill gas	kWh	0.0002	0.00020
Scope 1	Bioenergy	Biomass	Wood chips	kWh	0.01074	0.01132
Scope 1	Bioenergy	Biomass	Wood chips	tonnes	40.58114	42.76487
Scope 1	Bioenergy	Biomass	Wood pellets	kWh	0.01074	0.01132
Scope 1	Bioenergy	Biomass	Wood pellets	tonnes	51.56192	54.33654
Scope 1	Fuels	Liquid fuels	Aviation spirit	kWh	0.24382	0.24382
Scope 1	Fuels	Liquid fuels	Aviation spirit	litres	2.33116	2.33116
Scope 1	Fuels	Liquid fuels	Aviation turbine fuel	kWh	0.24758	0.24758
Scope 1	Fuels	Liquid fuels	Aviation turbine fuel	litres	2.54269	2.54269
Scope 1	Fuels	Liquid fuels	Burning oil (Kerosene)	kWh	0.24677	0.24677
Scope 1	Fuels	Liquid fuels	Burning oil (Kerosene)	litres	2.54016	2.54015
Scope 1	Fuels	Liquid fuels	Burning oil (Kerosene)	tonnes	3165.04181	3165.04181
Scope 1	Fuels	Solid fuels	Coal (industrial)	tonnes	2396.47994	2399.43994
Scope 1	Fuels	Liquid fuels	Diesel (100% mineral diesel)	litres	2.65937	2.66155
Scope 1	Fuels	Liquid fuels	Diesel (average biofuel blend)	litres	2.51206	2.51279
Scope 1	Fuels	Liquid fuels	Fuel oil	kWh	0.26813	0.26814
Scope 1	Fuels	Liquid fuels	Fuel oil	litres	3.17492	3.17493
Scope 1	Fuels	Liquid fuels	Fuel oil	tonnes	3228.89019	3228.89019
Scope 1	Fuels	Liquid fuels	Gas oil	kWh	0.2565	0.25649
Scope 1	Fuels	Liquid fuels	Gas oil	litres	2.75541	2.75541
Scope 1	Fuels	Liquid fuels	Gas oil	tonnes	3226.57859	3226.57859
Scope 1	Fuels	Gaseous fuels	LPG	kWh	0.21450	0.21450
Scope 1	Fuels	Gaseous fuels	LPG	litres	1.55713	1.55713
Scope 1	Fuels	Liquid fuels	Marine fuel oil	litres	3.10202	3.10202
Scope 1	Fuels	Liquid fuels	Marine gas oil	litres	2.77139	2.77139
Scope 1	Fuels	Gaseous fuels	Natural gas	kWh	0.18293	0.18290
Scope 1	Fuels	Liquid fuels	Petrol (100% mineral petrol)	litres	2.34503	2.35372
Scope 1	Fuels	Liquid fuels	Petrol (average biofuel blend)	litres	2.09747	2.08440
Scope 1	Fuels	Gaseous fuels	Propane	kWh	0.2141	0.21411
Scope 1	Fuels	Gaseous fuels	Propane	litres	1.54358	1.54357
Scope 1	Fuels	Liquid fuels	Waste oils	kWh	0.25641	0.25641
Scope 1	Fuels	Liquid fuels	Waste oils	litres	2.74924	2.74923
Scope 1	Fuels	Liquid fuels	Waste oils	tonnes	3219.37916	3219.37916
Scope 1	Medical gas (Process)	Other products	Desflurane	kg	2540	2540
Scope 1	Medical gas (Process)	Other products	Sevoflurane	kg	130	130
Scope 1	Medical gas (Process)	Other products	Isoflurane	kg	510	510
Scope 1	Medical gas (Process)	Other products	Anaesthetic Nitrous Oxide	kg	298	298
Scope 1	Refrigerants	Other products	HFC-134a	kg	1300	1300
Scope 1	Refrigerants	Other products	HFC-32	kg	677	677.00000
Scope 1	Refrigerants	Blends	R404A	kg	3943	3943.00000

Scope 1	Refrigerants	Blends	R407C	kg	1624	1624.00000
Scope 1	Refrigerants	Blends	R410A	kg	1924	1924.00000
Scope 1	Refrigerants	Blends	R422D	kg	2473	2473.00000
Scope 1	Refrigerants	Blends	R422E	kg	2350	2350.00000
Scope 1	Refrigerants	Blends	R423A	kg	2274	2274.00000
Scope 1	Refrigerants	Blends	R424A	kg	2212	2212.00000
Scope 1	Refrigerants	Blends	R425A	kg	1431	1431.00000
Scope 1	Refrigerants	Blends	R426A	kg	1371	1371.00000
Scope 1	Refrigerants	Blends	R427A	kg	2024	2024.00000
Scope 1	Refrigerants	Blends	R428A	kg	3417	3417.00000
Scope 1	Refrigerants	Blends	R429A	kg	13.8	15.30000
Scope 1	Refrigerants	Blends	R430A	kg	106	106.00000
Scope 1	Refrigerants	Blends	R431A	kg	40	40.00000
Scope 1	Refrigerants	Blends	R432A	kg	1.8	1.8
Scope 1	Refrigerants	Blends	R433A	kg	0.64	0.64
Scope 1	Refrigerants	Blends	R433B	kg	0.16	0.16
Scope 1	Refrigerants	Blends	R433C	kg	0.55	0.55
Scope 1	Refrigerants	Blends	R434A	kg	3075	3076.00000
Scope 1	Refrigerants	Blends	R435A	kg	28.4	28.40000
Scope 1	Refrigerants	Blends	R436A	kg	1.35	1.35
Scope 1	Refrigerants	Blends	R436B	kg	1.47	1.47
Scope 1	Refrigerants	Blends	R437A	kg	1639	1639.00000
Scope 1	Refrigerants	Blends	R438A	kg	2059	2059.00000
Scope 1	Refrigerants	Blends	R439A	kg	1828	1828.00000
Scope 1	Refrigerants	Blends	R440A	kg	156	156.00000
Scope 1	Refrigerants	Blends	R441A	kg	0.23	0.23
Scope 1	Refrigerants	Blends	R442A	kg	1754	1754.00000
Scope 1	Refrigerants	Blends	R443A	kg	1	1
Scope 1	Refrigerants	Blends	R444A	kg	89	89.00000
Scope 1	Refrigerants	Blends	R445A	kg	118	118.00000
Scope 1	Refrigerants	Blends	R500	kg	7564	7564.00000
Scope 1	Refrigerants	Blends	R501	kg	3870	3870
Scope 1	Refrigerants	Blends	R502	kg	4786	4786
Scope 1	Refrigerants	Blends	R503	kg	13299	13299
Scope 1	Refrigerants	Blends	R504	kg	4299	4299
Scope 1	Refrigerants	Blends	R505	kg	7956	7956
Scope 1	Refrigerants	Blends	R506	kg	3857	3857
Scope 1	Refrigerants	Blends	R507A	kg	3985	3985.00000
Scope 1	Refrigerants	Blends	R508A	kg	11607	11607.00000
Scope 1	Refrigerants	Blends	R508B	kg	11698	11698.00000
Scope 1	Refrigerants	Blends	R509A	kg	5758	5758.00000
Scope 1	Refrigerants	Blends	R510A	kg	1.24	1.24
Scope 1	Refrigerants	Blends	R511A	kg	7	7.00000
Scope 1	Refrigerants	Blends	R512A	kg	196	196.00000
Scope 1	Refrigerants	Other products	R600 = butane	kg	0.006	0.006
Scope 1	Refrigerants	Other products	R600A = isobutane	kg	3	3
Scope 1	Refrigerants	Other products	R601 = pentane	kg	5	5
Scope 1	Refrigerants	Other products	R601A = isopentane	kg	5	5
Scope 2	Heat and steam	Heat and steam	District heat and steam	kWh	0.17965	0.17965
Scope 2	Heat and steam	Heat and steam	Onsite heat and steam	kWh	0.17965	0.17965

Scope 2	Electricity	Electricity generated	Electricity: UK	kWh	0.20707	0.20705
Scope 2	Renewables	Renewable Elec Purchase Direct Supply	Renewable Elec Purchase Direct Supply	kWh	0	0
Scope 2	Renewables	Renewable Heat Purchase Direct Supply	Renewable Heat Purchase Direct Supply	kWh	0	0
Scope 2&3	Transport - car	Cars (by size)	Average business travel car - Battery Electric Vehicle	km	0.05480	0.04745
Scope 2&3	Transport - car	Cars (by size)	Average business travel car - Battery Electric Vehicle	miles	0.08819	0.07636
Scope 2&3	Transport - car	Cars (by size)	Average business travel car - Plug-in Hybrid Electric Vehicle	km	0.09392	0.10853
Scope 2&3	Transport - car	Cars (by size)	Average business travel car - Plug-in Hybrid Electric Vehicle	miles	0.15113	0.17465
Scope 3	Electricity	T&D- UK electricity	Transmission and distribution - Electricity: UK	kWh	0.01792	0.01830
Scope 3	Heat and steam	Heat and steam	Transmission and distribution - district heat & steam, 5% loss	kWh	0.00945	0.00946
Scope 3	Homeworking	Homeworking (office equipment + heating)	Homeworking (office equipment + heating)	FTE Working Hour	0.33378	0.33378
Scope 3	Hotel stay	Hotel stay	Hotel stay - UK	Room per night	10.4	10.40000
Scope 3	Hotel stay	Hotel stay	Hotel stay - UK (London)	Room per night	11.5	11.50000
Scope 3	Material use	Construction	Aggregates - Primary material production	tonnes	7.75138	7.75127
Scope 3	Material use	Construction	Aggregates - Recycled source	tonnes	3.19491	3.19485
Scope 3	Material use	Construction	Aggregates - Re-used	tonnes	2.21	2.21000
Scope 3	Material use	Construction	Asphalt - Primary material production	tonnes	39.21249	39.21249
Scope 3	Material use	Construction	Asphalt - Recycled source	tonnes	28.65491	28.65485
Scope 3	Material use	Construction	Asphalt - Re-used	tonnes	1.73826	1.73826
Scope 3	Material use	Construction	Average construction - Primary material production	tonnes	80.21282	74.88652
Scope 3	Material use	Electrical items	Batteries - Alkaline - Primary material production	tonnes	4633.47826	4633.47826
Scope 3	Material use	Electrical items	Batteries - Li ion - Primary material production	tonnes	6308	6308.00000
Scope 3	Material use	Electrical items	Batteries - NiMh - Primary material production	tonnes	28380	28380.00000
Scope 3	Material use	Construction	Bricks - Primary material production	tonnes	241.75138	241.75127
Scope 3	Material use	Other	Clothing - Primary material production	tonnes	22310	22310.00000
Scope 3	Material use	Other	Clothing - Re-used	tonnes	152.25	152.25000
Scope 3	Material use	Organic	Compost derived from food and garden waste - Primary material production	tonnes	114.83405	114.83347
Scope 3	Material use	Organic	Compost derived from garden waste - Primary material production	tonnes	112.01742	112.01684
Scope 3	Material use	Construction	Concrete - Primary material production	tonnes	131.75138	118.75127
Scope 3	Material use	Construction	Concrete - Recycled source	tonnes	3.19491	3.19485
Scope 3	Material use	Electrical items	Electrical items - fridges and freezers - Primary material production	tonnes	4363.33333	4363.33333
Scope 3	Material use	Electrical items	Electrical items - IT - Primary material production	tonnes	24865.47556	24865.47556
Scope 3	Material use	Electrical items	Electrical items - large - Primary material production	tonnes	3267	3267.00000
Scope 3	Material use	Electrical items	Electrical items - small - Primary material production	tonnes	5647.94563	5647.94563
Scope 3	Material use	Other	Food and drink - Primary material production	tonnes	3701.40359	3701.40359
Scope 3	Material use	Other	Glass - Primary material production	tonnes	1402.76667	1402.76667
Scope 3	Material use	Other	Glass - Recycled source	tonnes	823.18954	823.18954
Scope 3	Material use	Construction	Insulation - Primary material production	tonnes	1861.75138	1861.75127
Scope 3	Material use	Construction	Insulation - Recycled source	tonnes	1852.08125	1852.08114
Scope 3	Material use	Metal	Metal: aluminium cans and foil (excl. forming) - Primary material production	tonnes	9108.72731	9106.91851
Scope 3	Material use	Metal	Metal: aluminium cans and foil (excl. forming) - Recycled source	tonnes	990.4781	990.47810
Scope 3	Material use	Metal	Metal: mixed cans - Primary material production	tonnes	5254.64731	5105.63851
Scope 3	Material use	Metal	Metal: mixed cans - Recycled source	tonnes	1461.67759	1461.67759
Scope 3	Material use	Metal	Metal: scrap metal - Primary material production	tonnes	3669.43615	3464.56448
Scope 3	Material use	Metal	Metal: scrap metal - Recycled source	tonnes	1620.27606	1620.27606
Scope 3	Material use	Metal	Metal: steel cans - Primary material production	tonnes	3086.72731	2854.91851
Scope 3	Material use	Metal	Metal: steel cans - Recycled source	tonnes	1726.72731	1726.72731
Scope 3	Material use	Construction	Metals - Primary material production	tonnes	4005.13777	3815.78473
Scope 3	Material use	Construction	Metals - Recycled source	tonnes	1558.94894	1630.78661
Scope 3	Material use	Construction	Mineral oil - Primary material production	tonnes	1401	1401.00000
Scope 3	Material use	Construction	Mineral oil - Recycled source	tonnes	676	676.00000

Scope 3	Material use	Paper	Paper and board: board - Primary material production	tonnes	801.52177	1193.96586
Scope 3	Material use	Paper	Paper and board: board - Recycled source	tonnes	699.88184	1092.35486
Scope 3	Material use	Paper	Paper and board: mixed - Primary material production	tonnes	868.06994	1282.74402
Scope 3	Material use	Paper	Paper and board: mixed - Recycled source	tonnes	718.56937	1063.01519
Scope 3	Material use	Paper	Paper and board: paper - Primary material production	tonnes	910.4781	1339.31834
Scope 3	Material use	Paper	Paper and board: paper - Recycled source	tonnes	730.4781	1044.31834
Scope 3	Material use	Construction	Plasterboard - Primary material production	tonnes	120.05	120.05000
Scope 3	Material use	Construction	Plasterboard - Recycled source	tonnes	32.17	32.17000
Scope 3	Material use	Plastic	Plastics: average plastic film - Primary material production	tonnes	2560.25566	2910.46529
Scope 3	Material use	Plastic	Plastics: average plastic film - Recycled source	tonnes	1890.70135	1094.58257
Scope 3	Material use	Plastic	Plastics: average plastic rigid - Primary material production	tonnes	3263.92202	3345.30837
Scope 3	Material use	Plastic	Plastics: average plastic rigid - Recycled source	tonnes	2744.09248	1906.70384
Scope 3	Material use	Plastic	Plastics: average plastics - Primary material production	tonnes	3102.44851	3164.78049
Scope 3	Material use	Plastic	Plastics: average plastics - Recycled source	tonnes	2322.22425	1566.38638
Scope 3	Material use	Plastic	Plastics: HDPE (incl. forming) - Primary material production	tonnes	3255.9298	3086.39038
Scope 3	Material use	Plastic	Plastics: HDPE (incl. forming) - Recycled source	tonnes	2346.68907	1761.80819
Scope 3	Material use	Plastic	Plastics: LDPE and LLDPE (incl. forming) - Primary material production	tonnes	2586.72731	2959.31834
Scope 3	Material use	Plastic	Plastics: LDPE and LLDPE (incl. forming) - Recycled source	tonnes	1793.29541	1088.91851
Scope 3	Material use	Plastic	Plastics: PET (incl. forming) - Primary material production	tonnes	4018.48341	3854.91851
Scope 3	Material use	Plastic	Plastics: PET (incl. forming) - Recycled source	tonnes	3121.34429	2204.91851
Scope 3	Material use	Plastic	Plastics: PP (incl. forming) - Primary material production	tonnes	3090.8179	2568.58892
Scope 3	Material use	Plastic	Plastics: PP (incl. forming) - Recycled source	tonnes	2537.386	1303.58892
Scope 3	Material use	Plastic	Plastics: PS (incl. forming) - Primary material production	tonnes	3764.03981	4367.44048
Scope 3	Material use	Plastic	Plastics: PS (incl. forming) - Recycled source	tonnes	3187.08199	2660.39912
Scope 3	Material use	Plastic	Plastics: PVC (incl. forming) - Primary material production	tonnes	3399.17507	2935.77335
Scope 3	Material use	Plastic	Plastics: PVC (incl. forming) - Recycled source	tonnes	2485.74317	1838.83987
Scope 3	Material use	Construction	Soils - Recycled source	tonnes	0.98491	0.98485
Scope 3	Material use	Construction	Tyres - Primary material production	tonnes	3335.5719	3335.57190
Scope 3	Material use	Construction	Tyres - Re-used	tonnes	731.21789	731.21789
Scope 3	Material use	Construction	Wood - Primary material production	tonnes	312.61178	269.50416
Scope 3	Material use	Construction	Wood - Recycled source	tonnes	112.96968	no factor this year
Scope 3	Material use	Construction	Wood - Re-used	tonnes	38.54288	38.54288
Scope 3	Transport - car	Cars (by size)	Average car - Diesel	km	0.16983	0.16984
Scope 3	Transport - car	Cars (by size)	Average car - Diesel	miles	0.27332	0.27334
Scope 3	Transport - car	Cars (by size)	Average car - Hybrid	km	0.11898	0.12607
Scope 3	Transport - car	Cars (by size)	Average car - Hybrid	miles	0.19147	0.20288
Scope 3	Transport - car	Cars (by size)	Average car - Petrol	km	0.16391	0.16450
Scope 3	Transport - car	Cars (by size)	Average car - Petrol	miles	0.26379	0.26473
Scope 3	Transport - car	Cars (by size)	Average car - Unknown	km	0.16664	0.16691
Scope 3	Transport - car	Cars (by size)	Average car - Unknown	miles	0.26817	0.26860
Scope 1	Transport - car	Cars (by size)	Average fleet car - Battery Electric Vehicle	km	0	0
Scope 1	Transport - car	Cars (by size)	Average fleet car - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - car	Cars (by size)	Average fleet car - Plug-in Hybrid Electric Vehicle	km	0.06588	0.09360
Scope 1	Transport - car	Cars (by size)	Average fleet car - Plug-in Hybrid Electric Vehicle	miles	0.10601	0.15062
Scope 2&3	Transport - car	Cars (by size)	Large business travel car - Battery Electric Vehicle	km	0.05797	0.04925
Scope 2&3	Transport - car	Cars (by size)	Large business travel car - Battery Electric Vehicle	miles	0.09330	0.07925
Scope 2&3	Transport - car	Cars (by size)	Large business travel car - Plug-in Hybrid Electric Vehicle	km	0.10158	0.11923
Scope 2&3	Transport - car	Cars (by size)	Large business travel car - Plug-in Hybrid Electric Vehicle	miles	0.16349	0.19190
Scope 3	Transport - car	Cars (by size)	Large car - Diesel	km	0.20859	0.20729
Scope 3	Transport - car	Cars (by size)	Large car - Diesel	miles	0.33570	0.33362

Scope 3	Transport - car	Cars (by size)	Large car - Hybrid	km	0.15244	0.15486
Scope 3	Transport - car	Cars (by size)	Large car - Hybrid	miles	0.24530	0.24921
Scope 3	Transport - car	Cars (by size)	Large car - Petrol	km	0.27224	0.26885
Scope 3	Transport - car	Cars (by size)	Large car - Petrol	miles	0.43812	0.43267
Scope 3	Transport - car	Cars (by size)	Large car - Unknown	km	0.22612	0.22472
Scope 3	Transport - car	Cars (by size)	Large car - Unknown	miles	0.36389	0.36164
Scope 1	Transport - car	Cars (by size)	Large fleet car - Battery Electric Vehicle	km	0	0
Scope 1	Transport - car	Cars (by size)	Large fleet car - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - car	Cars (by size)	Large fleet car - Plug-in Hybrid Electric Vehicle	km	0.07082	0.10306
Scope 1	Transport - car	Cars (by size)	Large fleet car - Plug-in Hybrid Electric Vehicle	miles	0.11397	0.16587
Scope 2&3	Transport - car	Cars (by size)	Medium business travel car - Battery Electric Vehicle	km	0.05257	0.04625
Scope 2&3	Transport - car	Cars (by size)	Medium business travel car - Battery Electric Vehicle	miles	0.08458	0.07443
Scope 2&3	Transport - car	Cars (by size)	Medium business travel car - Plug-in Hybrid Electric Vehicle	km	0.08501	0.09312
Scope 2&3	Transport - car	Cars (by size)	Medium business travel car - Plug-in Hybrid Electric Vehicle	miles	0.13680	0.14985
Scope 3	Transport - car	Cars (by size)	Medium car - Diesel	km	0.16716	0.16807
Scope 3	Transport - car	Cars (by size)	Medium car - Diesel	miles	0.26902	0.27050
Scope 3	Transport - car	Cars (by size)	Medium car - Hybrid	km	0.10904	0.11490
Scope 3	Transport - car	Cars (by size)	Medium car - Hybrid	miles	0.17549	0.18492
Scope 3	Transport - car	Cars (by size)	Medium car - Petrol	km	0.17819	0.17726
Scope 3	Transport - car	Cars (by size)	Medium car - Petrol	miles	0.28676	0.28526
Scope 3	Transport - car	Cars (by size)	Medium car - Unknown	km	0.17246	0.17256
Scope 3	Transport - car	Cars (by size)	Medium car - Unknown	miles	0.27754	0.27771
Scope 1	Transport - car	Cars (by size)	Medium fleet car - Battery Electric Vehicle	km	0	0
Scope 1	Transport - car	Cars (by size)	Medium fleet car - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - car	Cars (by size)	Medium fleet car - Plug-in Hybrid Electric Vehicle	km	0.06144	0.08120
Scope 1	Transport - car	Cars (by size)	Medium fleet car - Plug-in Hybrid Electric Vehicle	miles	0.09887	0.13066
Scope 3	Transport - car	Motorbike	Motorbike - Average	km	0.11367	0.11367
Scope 3	Transport - car	Motorbike	Motorbike - Average	miles	0.18294	0.18293
Scope 2&3	Transport - car	Cars (by size)	Small business travel car - Battery Electric Vehicle	km	0.04823	0.04284
Scope 2&3	Transport - car	Cars (by size)	Small business travel car - Battery Electric Vehicle	miles	0.07763	0.06895
Scope 2&3	Transport - car	Cars (by size)	Small business travel car - Plug-in Hybrid Electric Vehicle	km	0.05402	0.06078
Scope 2&3	Transport - car	Cars (by size)	Small business travel car - Plug-in Hybrid Electric Vehicle	miles	0.08694	0.09782
Scope 3	Transport - car	Cars (by size)	Small car - Diesel	km	0.13931	0.13994
Scope 3	Transport - car	Cars (by size)	Small car - Diesel	miles	0.22420	0.22522
Scope 3	Transport - car	Cars (by size)	Small car - Hybrid	km	0.10150	0.11274
Scope 3	Transport - car	Cars (by size)	Small car - Hybrid	miles	0.16336	0.18143
Scope 3	Transport - car	Cars (by size)	Small car - Petrol	km	0.14080	0.14370
Scope 3	Transport - car	Cars (by size)	Small car - Petrol	miles	0.22660	0.23126
Scope 3	Transport - car	Cars (by size)	Small car - Unknown	km	0.14037	0.14262
Scope 3	Transport - car	Cars (by size)	Small car - Unknown	miles	0.22591	0.22953
Scope 1	Transport - car	Cars (by size)	Small fleet car - Battery Electric Vehicle	km	0	0
Scope 1	Transport - car	Cars (by size)	Small fleet car - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - car	Cars (by size)	Small fleet car - Plug-in Hybrid Electric Vehicle	km	0.02163	0.03012
Scope 1	Transport - car	Cars (by size)	Small fleet car - Plug-in Hybrid Electric Vehicle	miles	0.03481	0.04848
Scope 3	Transport - public	Bus	Average local bus	passenger.km	0.10215	0.10846
Scope 3	Transport - public	Taxis	Black cab	km	0.30604	0.30603
Scope 3	Transport - public	Taxis	Black cab	passenger.km	0.20402	0.20402
Scope 3	Transport - public	Bus	Coach	passenger.km	0.02718	0.02717
Scope 3	Transport - public	Ferry	Ferry - Average (all passenger)	passenger.km	0.11270	0.11270
Scope 3	Transport - public	Ferry	Ferry - Car passenger	passenger.km	0.12933	0.12933

Scope 3	Transport - public	Ferry	Ferry - Foot passenger	passenger.km	0.01871	0.01871
Scope 3	Transport - public	Flights	Flights - Domestic, to/from UK - Average passenger	passenger.km	0.27258	0.27257
Scope 3	Transport - public	Flights	Flights - International, to/from non-UK - Average passenger	passenger.km	0.17580	0.17580
Scope 3	Transport - public	Flights	Flights - International, to/from non-UK - Business class	passenger.km	0.39044	0.39044
Scope 3	Transport - public	Flights	Flights - International, to/from non-UK - Economy class	passenger.km	0.13464	0.13465
Scope 3	Transport - public	Flights	Flights - International, to/from non-UK - First class	passenger.km	0.53854	0.53854
Scope 3	Transport - public	Flights	Flights - International, to/from non-UK - Premium economy class	passenger.km	0.21542	0.21542
Scope 3	Transport - public	Flights	Flights - Long-haul, to/from UK - Average passenger	passenger.km	0.26128	0.26128
Scope 3	Transport - public	Flights	Flights - Long-haul, to/from UK - Business class	passenger.km	0.58029	0.58028
Scope 3	Transport - public	Flights	Flights - Long-haul, to/from UK - Economy class	passenger.km	0.20011	0.20011
Scope 3	Transport - public	Flights	Flights - Long-haul, to/from UK - First class	passenger.km	0.80040	0.80040
Scope 3	Transport - public	Flights	Flights - Long-haul, to/from UK - Premium economy class	passenger.km	0.32016	0.32015
Scope 3	Transport - public	Flights	Flights - Short-haul, to/from UK - Average passenger	passenger.km	0.18592	0.18592
Scope 3	Transport - public	Flights	Flights - Short-haul, to/from UK - Business class	passenger.km	0.27430	0.27430
Scope 3	Transport - public	Flights	Flights - Short-haul, to/from UK - Economy class	passenger.km	0.18287	0.18287
Scope 3	Transport - public	Rail	International rail	passenger.km	0.00446	0.00446
Scope 3	Transport - public	Rail	Light rail and tram	passenger.km	0.02860	0.02860
Scope 3	Transport - public	Bus	Local bus (not London)	passenger.km	0.11836	0.12999
Scope 3	Transport - public	Bus	Local London bus	passenger.km	0.07832	0.07447
Scope 3	Transport - public	Rail	London Underground	passenger.km	0.02780	0.02780
Scope 3	Transport - public	Rail	National rail	passenger.km	0.03546	0.03546
Scope 3	Transport - public	Taxis	Regular taxi	km	0.20806	0.20805
Scope 3	Transport - public	Taxis	Regular taxi	passenger.km	0.14861	0.14861
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Average (up to 3.5 tonnes) - Battery Electric Vehicle	km	0.07346	0.07922
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Average (up to 3.5 tonnes) - Battery Electric Vehicle	miles	0.11824	0.12752
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class I (up to 1.305 tonnes) - Battery Electric Vehicle	km	0.03850	0.04254
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class I (up to 1.305 tonnes) - Battery Electric Vehicle	miles	0.06197	0.06847
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class II (1.305 to 1.74 tonnes) - Battery Electric Vehicle	km	0.05932	0.06556
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class II (1.305 to 1.74 tonnes) - Battery Electric Vehicle	miles	0.09547	0.10553
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class III (1.74 to 3.5 tonnes) - Battery Electric Vehicle	km	0.08967	0.08929
Scope 2&3	Transport - van/HGV	Vans	Business Travel Van - Class III (1.74 to 3.5 tonnes) - Battery Electric Vehicle	miles	0.14430	0.14369
Scope 1	Transport - van/HGV	Vans	Fleet Van - Average (up to 3.5 tonnes) - Battery Electric Vehicle	km	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Average (up to 3.5 tonnes) - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class I (up to 1.305 tonnes) - Battery Electric Vehicle	km	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class I (up to 1.305 tonnes) - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class II (1.305 to 1.74 tonnes) - Battery Electric Vehicle	km	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class II (1.305 to 1.74 tonnes) - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class III (1.74 to 3.5 tonnes) - Battery Electric Vehicle	km	0	0
Scope 1	Transport - van/HGV	Vans	Fleet Van - Class III (1.74 to 3.5 tonnes) - Battery Electric Vehicle	miles	0	0
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All artics - Average laden	km	0.90644	0.90581
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All artics - Average laden	miles	1.45877	1.45775
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All HGVs - Average laden	km	0.87205	0.87296
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All HGVs - Average laden	miles	1.40341	1.40489
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All rigids - Average laden	km	0.82313	0.82657
Scope 1	Transport - van/HGV	HGV (all diesel)	HGV (all diesel) - All rigids - Average laden	miles	1.32470	1.33023
Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All artics - Average laden	km	1.04867	1.04817
Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All artics - Average laden	miles	1.68766	1.68685
Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All HGVs - Average laden	km	1.02098	1.02228
Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All HGVs - Average laden	miles	1.64310	1.64520
Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All rigids - Average laden	km	0.98025	0.98435

Scope 1	Transport - van/HGV	HGVs refrigerated (all diesel)	HGVs refrigerated (all diesel) - All rigids - Average laden	miles	1.57754	1.58414
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Diesel	km	0.23128	0.25023
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Diesel	miles	0.37224	0.40273
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Petrol	km	0.20132	0.22095
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Petrol	miles	0.32400	0.35558
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Unknown	km	0.23037	0.24934
Scope 1	Transport - van/HGV	Vans	Vans - Average (up to 3.5 tonnes) - Unknown	miles	0.37075	0.40127
Scope 1	Transport - van/HGV	Vans	Vans - Class I (up to 1.305 tonnes) - Diesel	km	0.14212	0.15356
Scope 1	Transport - van/HGV	Vans	Vans - Class I (up to 1.305 tonnes) - Diesel	miles	0.22875	0.24716
Scope 1	Transport - van/HGV	Vans	Vans - Class I (up to 1.305 tonnes) - Petrol	km	0.18217	0.20071
Scope 1	Transport - van/HGV	Vans	Vans - Class I (up to 1.305 tonnes) - Petrol	miles	0.29318	0.32299
Scope 1	Transport - van/HGV	Vans	Vans - Class II (1.305 to 1.74 tonnes) - Diesel	km	0.17405	0.18832
Scope 1	Transport - van/HGV	Vans	Vans - Class II (1.305 to 1.74 tonnes) - Diesel	miles	0.28013	0.30309
Scope 1	Transport - van/HGV	Vans	Vans - Class II (1.305 to 1.74 tonnes) - Petrol	km	0.19594	0.21709
Scope 1	Transport - van/HGV	Vans	Vans - Class II (1.305 to 1.74 tonnes) - Petrol	miles	0.31534	0.34936
Scope 1	Transport - van/HGV	Vans	Vans - Class III (1.74 to 3.5 tonnes) - Diesel	km	0.25346	0.27365
Scope 1	Transport - van/HGV	Vans	Vans - Class III (1.74 to 3.5 tonnes) - Diesel	miles	0.40792	0.44042
Scope 1	Transport - van/HGV	Vans	Vans - Class III (1.74 to 3.5 tonnes) - Petrol	km	0.31444	0.34923
Scope 1	Transport - van/HGV	Vans	Vans - Class III (1.74 to 3.5 tonnes) - Petrol	miles	0.50605	0.56201
Scope 3	Waste	Construction	Aggregates - Landfill	tonnes	1.23401	1.23393
Scope 3	Waste	Construction	Aggregates - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Construction	Asbestos - Landfill	tonnes	5.91332	5.91325
Scope 3	Waste	Construction	Asphalt - Landfill	tonnes	1.23401	1.23393
Scope 3	Waste	Construction	Asphalt - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Construction	Average construction - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Average construction - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Electrical items	Batteries - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Electrical items	Batteries - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Other	Books - Combustion	tonnes	21.07310	6.41061
Scope 3	Waste	Other	Books - Landfill	tonnes	1164.09963	1164.39015
Scope 3	Waste	Other	Books - Recycled	tonnes	21.0731	6.41061
Scope 3	Waste	Construction	Bricks - Landfill	tonnes	1.23401	1.23393
Scope 3	Waste	Clinical	Clinical Waste - Orange Stream	tonnes	273	273
Scope 3	Waste	Clinical	Clinical Waste - Other	tonnes	1000	1000
Scope 3	Waste	Clinical	Clinical Waste - Red Stream	tonnes	1000	1000
Scope 3	Waste	Clinical	Clinical Waste - Yellow Stream	tonnes	297	297
Scope 3	Waste	Other	Clothing - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Other	Clothing - Landfill	tonnes	496.68331	496.68303
Scope 3	Waste	Other	Clothing - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Commercial and industrial waste - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Commercial and industrial waste - Landfill	tonnes	520.33474	520.33420
Scope 3	Waste	Construction	Concrete - Landfill	tonnes	1.23401	1.23393
Scope 3	Waste	Construction	Concrete - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Other	Glass - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Other	Glass - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Other	Glass - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Household/Municipal/Domestic waste - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Household/Municipal/Domestic waste - Landfill	tonnes	497.04471	497.04416
Scope 3	Waste	Refuse	Mixed dry recyclates - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Insulation - Landfill	tonnes	1.23401	1.23393

Scope 3	Waste	Construction	Insulation - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Metal	Metal: aluminium cans and foil (excl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: aluminium cans and foil (excl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Metal	Metal: aluminium cans and foil (excl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: mixed cans - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: mixed cans - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Metal	Metal: mixed cans - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: scrap metal - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: scrap metal - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Metal	Metal: scrap metal - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: steel cans - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Metal	Metal: steel cans - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Metal	Metal: steel cans - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Metals - Landfill	tonnes	1.26435	1.26435
Scope 3	Waste	Construction	Metals - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Construction	Mineral oil - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Mineral oil - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Organic: food and drink waste - Anaerobic digestion	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: food and drink waste - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Organic: food and drink waste - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: food and drink waste - Landfill	tonnes	700.20988	700.20961
Scope 3	Waste	Refuse	Organic: garden waste - Anaerobic digestion	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: garden waste - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Organic: garden waste - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: garden waste - Landfill	tonnes	646.60659	646.60632
Scope 3	Waste	Refuse	Organic: mixed food and garden waste - Anaerobic digestion	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: mixed food and garden waste - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Refuse	Organic: mixed food and garden waste - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Refuse	Organic: mixed food and garden waste - Landfill	tonnes	655.98717	655.98690
Scope 3	Waste	Paper	Paper and board: board - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Paper	Paper and board: board - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Paper	Paper and board: board - Landfill	tonnes	1164.39042	1164.39015
Scope 3	Waste	Paper	Paper and board: board - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Paper	Paper and board: mixed - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Paper	Paper and board: mixed - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Paper	Paper and board: mixed - Landfill	tonnes	1164.39042	1164.39015
Scope 3	Waste	Paper	Paper and board: mixed - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Paper	Paper and board: paper - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Paper	Paper and board: paper - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Paper	Paper and board: paper - Landfill	tonnes	1164.39042	1164.39015
Scope 3	Waste	Paper	Paper and board: paper - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Plasterboard - Landfill	tonnes	71.95000	71.95000
Scope 3	Waste	Construction	Plasterboard - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: average plastic film - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: average plastic film - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: average plastic film - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: average plastic rigid - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: average plastic rigid - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: average plastic rigid - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: average plastics - Combustion	tonnes	21.28081	6.41061

Scope 3	Waste	Plastic	Plastics: average plastics - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: average plastics - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: HDPE (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: HDPE (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: HDPE (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: LDPE and LLDPE (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: LDPE and LLDPE (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: LDPE and LLDPE (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PET (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PET (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: PET (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PP (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PP (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: PP (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PS (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PS (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: PS (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PVC (incl. forming) - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Plastic	Plastics: PVC (incl. forming) - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Plastic	Plastics: PVC (incl. forming) - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Soils - Landfill	tonnes	19.51734	19.51726
Scope 3	Waste	Construction	Soils - Recycled	tonnes	0.98491	0.98485
Scope 3	Waste	Construction	Tyres - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Electrical items	WEEE - fridges and freezers - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Electrical items	WEEE - large - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Electrical items	WEEE - large - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Electrical items	WEEE - mixed - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Electrical items	WEEE - mixed - Recycled	tonnes	21.28081	6.41061
Scope 3	Waste	Electrical items	WEEE - mixed - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Electrical items	WEEE - small - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Electrical items	WEEE - small - Landfill	tonnes	8.88413	8.88386
Scope 3	Waste	Construction	Wood - Combustion	tonnes	21.28081	6.41061
Scope 3	Waste	Construction	Wood - Composting	tonnes	8.91242	8.88386
Scope 3	Waste	Construction	Wood - Landfill	tonnes	925.2445	925.24423
Scope 3	Waste	Construction	Wood - Recycled	tonnes	21.28081	6.41061
Scope 3	Water	Water supply	Water supply	cubic metres	0.1	0.10000
Scope 3	Water	Water supply	Water supply	million litres	110.0	110.00000
Scope 3	Water	Water supply	Water treatment	cubic metres	0.19	0.19000
Scope 3	Water	Water supply	Water treatment	million litres	190	190.00000

	END					