

University for the Common Good

Carbon Footprint Report for 2023-24

Date: 11th December 2024 Version: 1 (Final) Author: Kärt Tori & Paulo Cruz UPRG approval: 4th February 2024

Executive Summary

Glasgow Caledonian University (the University) reports its greenhouse gas emissions (GHG) annually, with reports used to improve performance, meet compliance obligations and track progress towards the University's own environmental commitments.

The overall reporting approach is unchanged, with the University following the GHG Protocol Standards and adhering to the principles of accuracy, completeness, consistency, relevance and transparency. The reporting boundaries (operational control) are remaining the same. There have, however, been improvements in data granularity, with the introduction of the ability to report data for London separately.

In 2023-24 the University's GHG emissions' inventory (all Scopes) was 51,005 tonnes CO_2e . This represents a 1.3% decline in emissions from the previous reporting period (2022-23) and a 28% increase relative to the 2014-15 baseline (Figure 1 and Table 1).

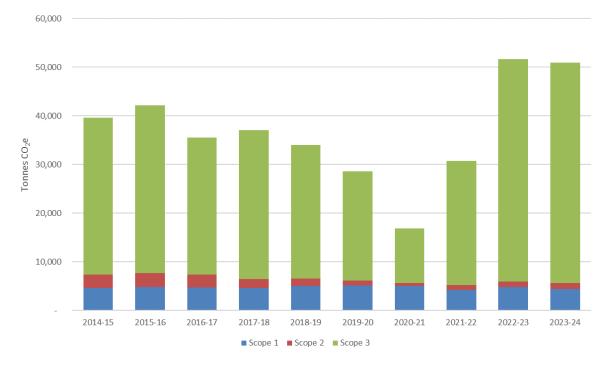


Figure 1. University's GHG emissions breakdown (Tonnes of CO₂e by Scopes) since 2014-15 baseline year.

Change relative to:	Scope 1	Scope 2	Scope 3	Total Emissions
Previous (2022-23)	-7% (335 tCO2e)	+8% (89 tCO2e)	-1% (423 tCO2e)	-1.3% (671 tCO2e)
Baseline (2014-15)	-4% (170 tCO2e)	-57% (1.579 tCO2e)	+41% (13.139 tCO2e)	+28% (11.390 tCO2e)

Table 1 Changes in 2023-24 GHG emissions relative to previous reporting period (2022-23) and the University's baseline (2014-15).

Year-on-year changes in Scope 1 and 2 reflect minor changes in how the University uses gas and electricity, whilst Scope 3 changes are not significant. Relative to the baseline, changes in Scope 1 and 2 reflect improvements in the University's energy efficiency, and decarbonisation of the National Grid (for electricity). Changes in Scope 3 reflect a fundamental change in where non-UK domiciled students travel from.

It is anticipated that Scope 1 and 2 emissions will continue to fall as the University ramps up its climate mitigation activity and the national grid (electricity) decarbonisation continues. The

University will also continue to deliver climate action on activities included in Scope 3 emissions (as detailed in its various thematic action plans¹).

¹ Available from the University's <u>sustainability web pages</u>.

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Introduction

Glasgow Caledonian University (the University) reports its greenhouse gas emissions (GHG) annually and through its Environmental Management System uses them to benchmark performance, target improvements, assess progress towards environmental commitments, and meet compliance obligations.

The 2023-24 reporting period is considered a normal operating period with no exceptional circumstances affecting University operations.

Data & Methodology

The University reports its GHG emissions according to the GHG Protocol Standards² and adheres to the reporting principles of: accuracy, completeness, consistency, relevance and transparency. The reporting boundaries (operational control) and overall methodology for the 2023-24 GHG emissions inventory are the same as those used in previous reporting periods.

Whilst the general approach and datasets have not changed (Table 2), the 2023-24 inventory incorporates the following changes:

- Created the ability to report emissions from operations in London separately (although this does not yet cover all emission categories e.g. UK domiciled student travel home).
- Included emissions from the University's travel for the University's international mobility programme.

There have also been a number of corrections and updates in emission factors (e.g. waste produced and investments held by the University), the most significant being a correction of a calculation error (since 2022-23) for the 'Working from Home' emission factor.

It is also noted that although the data and calculations in this report were not subject to independent verification or quality assurance, they benefited from a peer review exercise with the University of Glasgow (in collaboration with the EUAC – Scotland).

² Greenhouse Gas Protocol – <u>Corporate Standard</u> and <u>Corporate Value Chain (Scope 3) Standard</u>.

Emission	Scope	Emission Activity	Data quality observations
Category			
Organisation's buildings	1	Gas consumption	High quality data derived from gas meter readings.
Organisation's buildings	1	Refrigerant Gases	High quality data derived from contractors' measurements of systems' fluorinated gas charge.
Organisation's vehicles	1	Business travel (own fleet)	High quality data derived from fuel card reports.
Purchased electricity	2	Electricity (Nat. Grid) Total	High quality data derived from electricity meter readings.
Purchased Goods & Services	3	Water	High quality data derived from water meter readings.
Purchased Goods & Services	3	Procurement - HEPA tool (formerly HESCET tool)	Low-medium quality data. Derived from spend data. Excl. capital goods (reported separately).
Other fuel & energy rel. activities	3	Electricity (transmission & distribution losses)	High quality data derived from electricity meter readings.
Other fuel & energy rel. activities	3	Well-to-tank emissions from fuels/energy reported as scope 1 and 2	High quality data derived from consumption data (as detailed above.
Waste Generated in Operations	3	General Waste & recycling	Medium-high. Data for Glasgow derived from contractors' weighing systems. Includes waste data for refurbishment projects. C. Court and GCU London based on historic estimates.
Waste Generated in Operations	3	Wastewater	High quality data derived from water meter readings. Assumed 95% of purchased water becomes wastewater.
Business travel	3	Travel (business – not owned)	Medium-high. Derived from supplier records and expenses claims systems,
Business travel	3	International mobility (exchange) programmes	High quality data derived from student records (and which include details of destination and mode of travel).
Business travel	3	Well-to-tank emissions for fuels used in 'Travel (business – not owned)' (above)	High. Derived from supplier records.
Employee commuting	3	Travel (commuting – staff)	Medium quality. Glasgow data derived from 2022 Travel Survey. London data derived from 2024 Travel Survey.
Employee commuting	3	Working from home (staff)	Medium quality. Derived from 2022 travel survey. Derived from Scottish Government intensity factor for FTE.
Downstream transportation and distribution	3	Travel (commuting – students)	Medium quality. Glasgow data derived from 2022 Travel Survey. London data derived from 2024 Travel Survey
Downstream transportation and distribution	3	UK domiciled students – travel home.	Low-medium. Based on historic travel surveys (not 2022).
Downstream transportation and distribution	3	International students – travel home.	Low-medium. Based on historic travel surveys (not 2022).
Investments Capital Goods	3 3	Investments Procurement - HEPA tool (formerly HESCET tool)	Medium. Derived from carbon intensity of portfolio value. Low-medium quality data. Derived from spend data.

Table 2 Observations on data quality for the University's GHG emissions inventory. New emission categories are identified in **bold** text and new activity datasets in **bold underlined** text. New data observations are highlighted grey.

Inventory & Emissions

In 2023-24 the University's GHG emissions' inventory was 51,005 tonnes CO_2e , a 1% decrease on the previous reporting period (2022-23). They are also 29% higher than the 2014-15 baseline. These emissions are marginally higher than in the previous reporting period due to a calculation error (in emission from staff working from home).

Figure 2 and Table 3 provide a summary of the University's current and historic GHG emissions. Figure 3 provides a breakdown by Activity Category in each Scope, whilst Figure 4 provides a breakdown by thematic grouping. Trends within the thematic groupings are discussed in the next sections. Appendix A contains the University's full GHG emissions' inventory for 2023-24.

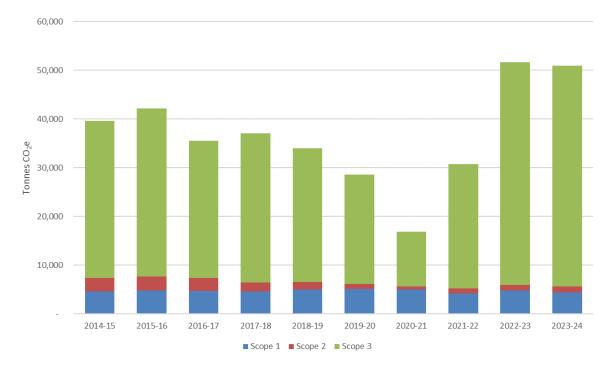


Figure 2 The University's GHG emissions (tonnes CO₂e by scope) since 2014-15.

Scope	Academic Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	Direct combustion of fuels and other fugitive emissions.	4,598	4,794	4,745	4,589	4,974	5,136	4,970	4,171	4,763	4,428
2	Electricity from the National Grid.	2,784	2,902	2,613	1,881	1,576	998	601	1,040	1,116	1,205
3	Other up- and downstream activities out-with the University's operational control.	32,232	34,509	28,200	30,625	27,503	22,415	11,022	25,564	45,794	45,371
Total		39,615	42,205	35,557	37,095	34,053	28,549	16,593	30,775	51,673	51,005

Table 3 The University's GHG emissions (tonnes CO_2e) by scope for since 2014-15.

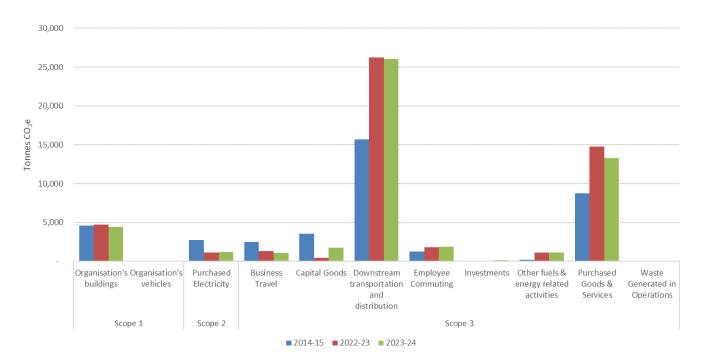


Figure 3 GHG emissions by activity category for 2023-24 compared to the previous reporting period (2022-23) and the University's baseline (2014-15).

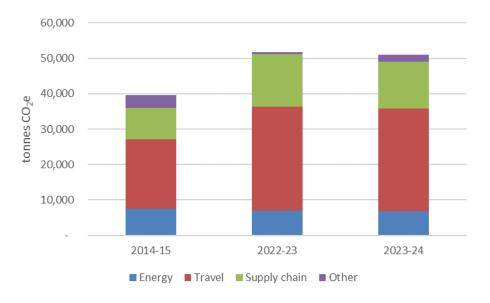


Figure 4 GHG emissions by thematic grouping for 2023-24 compared to the previous reporting period (2022-23) and the University's baseline (2014-15).

Trends & Observations

The 2023-24 reporting period is considered a normal operating period with no exceptional circumstances affecting the University's operations. The sections below explore how emissions in each of the thematic groups have changed since the previous reporting period (2022-23) and the University's baseline (2014-15).

Travel

In the 2023-24 reporting period, travel activity at the University emitted 29,011 tCO₂e, (56% of total reported emissions). The majority of travel emissions are reported as Scope 3, with the exception being emissions from the University's fleet (8.22 tCO2e) which are reported as Scope 1.

Reported emissions include well-to-tank (WTT) emissions for fuels associated with business travel because they provide a more comprehensive insight into the climate impact of the University's business travel decisions. In this reporting period, emissions from the University's international mobility (exchange) programme were added as business travel (and back-dated for 2022-23).

Travel emissions are comparable to the previous reporting period (with a 1.2% decrease), but 48% higher than the baseline. The increase relative to the baseline is due to an increase in student numbers and where international students travel from. A breakdown of emissions in this category is provided in Figure 5.

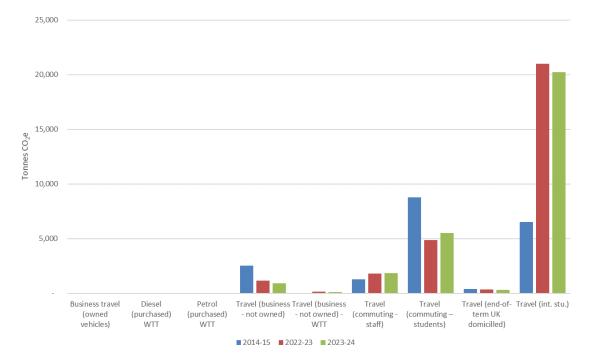


Figure 5 GHG emissions from travel to, from and on-behalf of the University for 2024-24 compared to the previous reporting period (2022-23) and the University's baseline (2014-15).

Supply Chain

Supply chain emissions are reported as Scope 3 and are derived primarily from spend-based intensity factors for spend with suppliers the University does not have direct 'activity' data for. In 2023-24 emissions attributed to the University's supply chain contributed 13,267 tCO₂e to the University's GHG inventory (26% of all reported emissions). These emissions are 10 % lower than in the previous reporting period. Relative to the 2014-15 baseline, emissions from the University's supply chain are 51% higher and aligned to growth in the University's budget. Figure 6 shows the change in supply-chain emissions.

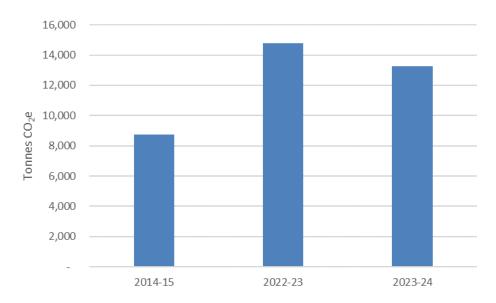


Figure 6 Supply chain emissions (tCO₂e) for 2023-24 compared to the previous reporting period (2022-23) and the University's baseline (2014-15).

Supply chain emissions are derived from spend with 902 suppliers, with the top 50 suppliers (by GHG emissions) being responsible for just over 77% of total supply chain emissions.

The main source of emissions (by Proc HE category³) is software supplies which represented 34% of all supply chain emissions (Table 4). The top 10 Proc HE categories account for nearly 72% of supply chain emissions.

Proc HE category description	tCO ₂ e	No.	% supply chain	Rank
		Suppliers	emissions	
IT Software including Bespoke Licences	4805.939262	47	34.25%	1
Maintenance				
Catering Services Outsourced at a fixed site	2000.145799	5	14.26%	2
Medical, Small Apparatus, Equipment and	591.5264266	30	4.22%	3
Instruments				
Building Related Professional Services	480.7008563	17	3.43%	4
Other/General Computer Supplies and	394.7091885	32	2.81%	5
services				
Temporary & Recruitment Employment	393.3058857	16	2.80%	6
Agencies (Staff)				
Consultancy include IT excluding Estates	390.9586689	55	2.79%	7
Data Information Services	371.2682793	13	2.65%	8
Bespoke IT Solutions	352.7585034	1	2.51%	9
Travel Agency Services	265.354511	2	1.89%	10

Table 4 Top 10 Proc HE categories for GHG emissions (tCO2e) in the University's supply chain in 2023-24.

It is noted from historical analysis of this dataset that emissions for some suppliers in the Proc HE categories are over estimated, and where activity data is available the University will seek to use this instead where emissions exceed the 1% materiality threshold.

The methodology for estimating supply chain emissions is also not sufficiently sensitive to reflect the University's individual procurement decisions, but reporting these emissions helps identify hot-spots

³ Proc HE is a national Commodity Coding convention used by the HE Sector and Local Authorities.

to focus on and suppliers to engage to understand how they can support the University's climate commitments.

Energy

Emissions from energy used throughout the University's Estate are reported as all three scopes (although only the Scope 1 and 2 emissions are included in the University's carbon neutrality target).

In 2023-24 the University emitted 6,729 tCO₂e (13% of all reported emissions), 2% lower than the previous reporting period (2022-23) and 11% lower than the 2014-15 baseline. 65% of emissions were attributed to gas (Scope 1), 18% to purchased electricity (Scope 2) and the remaining 17% to transmission and distribution losses of purchased electricity and well-to-tank emissions for all purchased energy (Scope 3) (Figure 7).

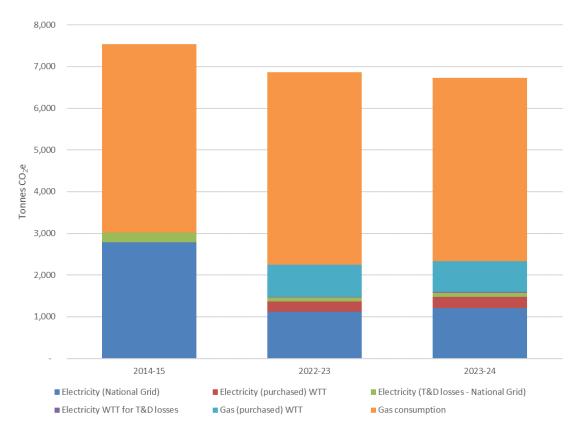


Figure 7 GHG emissions for energy use at the University (including 'other energy emissions' such as transmission and distribution losses and well-to-tank emissions) for 2023-24 compared to the previous reporting period (2022-23) and the University's baseline (2014-15).

Historically (prior to 2021-22), emissions from energy were reported primarily for consumption (electricity transmission and distribution losses were also reported). Figure 8 is therefore included to provide a like-for-like comparison of historic emissions from energy consumption only.

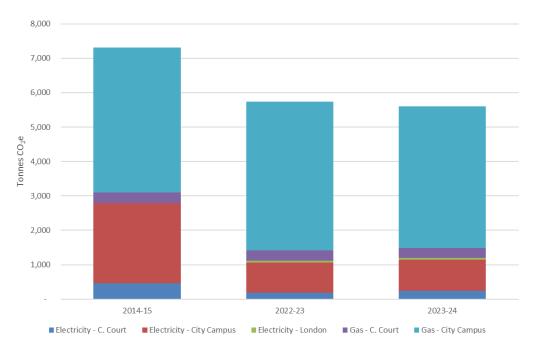


Figure 8 Energy consumption emissions only (i.e. without scope 3 emissions for transmission and distribution losses or well to tank emissions) for 2023-24, 2022-23 and 2014-15 (the University's reporting baseline).

There is a generally downward trend in emissions from energy use with a 2% reduction in 2023-24 compared to 2022-23, and a 23% reduction relative to the 2014-15 baseline.

It is anticipated that energy emissions will continue to fall as a result of further demand reduction, improved efficiency and further supply decarbonisation. There may also be an additional opportunity to accentuate this trend by considering space utilization and productivity.

Other

Emissions from other activity, which includes Capital Projects, Capital Equipment (reported separately for this reporting period), Investments, Refrigerants, Waste and Recycling, Wastewater and Water were 1,954 tCO₂e compared to 659 tCO₂e in the previous reporting period (Table 5). With the exception of refrigerants (reported as Scope 1), emissions in this category are reported as Scope 3.

There is insufficient historical data to comment on trends for Capital Equipment, disaggregated from the University's supply-chain emissions in this reporting period. Emissions from Capital Projects have increased, but the underlying causes are unclear. Emissions from refrigerant losses are lower, but within historical fluctuations (commensurate with the age and condition of refrigeration equipment at the University). Emissions from Waste and Recycling are lower due to lower arisings and lower emission factor (72%). Emissions from Investments have increased, mainly due to the readjustment of emissions factors (19% increase for Endowment B and 137% increase for Pension). All other emission categories within this group are comparable to previous reporting periods.

Source	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Capital Equipment	7	2	7	2	2	2	2	2	2	N 1,065
Capital Projects									439	729
Investments							140	72	55	129
Refrigerant Gases	61	225	162	100	25	103	159	42	135	20
Waste & Recycling	67	62	84	81	17	13	3	14	13	3
Wastewater	34	32	14	27	27	7	2	4	5	5
Water	17	16	15	14	14	3	1	2	3	3
Total	179	335	275	222	82	125	306	134	659	1,954

Table 5 Other emissions in the University's emission inventory since 2014-15.

Progress towards Carbon Neutrality

This section provides a high-level overview of progress towards the University'scarbon neutrality commitment (Scopes 1 and 2) by 2040, including interim targets for 2030.



Figure 9 Historic and actual emissions compared to target for 2030 and 2040. 'Trendline' include to facilitate comparison of progress.

Figure 9 shows that whilst emissions are on a downward (straight-line) trajectory, the University will need to enhance emission mitigation efforts to achieve its targets. Some activity is already underway and will be reflected in future reporting periods. This and subsequent activity will be detailed in the University's forthcoming Estates Carbon Neutrality Roadmap.

Closing Remarks

For the 2023-24 reporting period, emissions across the estate are comparable to 2022-23 and approximately 28% more than the 2014-25 baseline. The increase is attributed to changes in where non-UK domiciled students travel from and is restricted to Scope 3 emissions. Scope 1 and 2

(combined) show a 5% year-on-year decrease and a 24% decrease relative to the 2014-15 baseline. It is anticipated that Scope 1 and 2 emissions will continue to fall as the University acceleratesits climate mitigation activity and the national grid (electricity) decarbonisation continues to gather pace. The University will also continue to deliver climate action on activities included in Scope 3 emissions.

Appendix A - Full GHG Emissions Inventory

Glasgow Caledonian University's full GHG emissions inventory for 2023-24 is presented below. A spreadsheet with this and previous inventories is available from: https://www.gcu.ac.uk/aboutgcu/commongood/sustainability/data

Scope Em		Source	Data Source	Qty Qty (U)	EF EF (U)	EF Source	tonnes CO2e Acc.Year
1 Ga	as consumption	City Campus C. Court R134A	City Campus C. Court - P2	22,487,502 kWh 1,570,692 kWh kg	0.1829 kg CO2e.kWh 0.1829 kg CO2e.kWh 1,300 kg CO2e.kg	Defra: Fuels (Energy gross - CV) 2024 Defra: Fuels (Energy gross - CV) 2024 Defra: Refrigerant & Other (2024)	4,112.96 2023-24 287.28 2023-24 - 2023-24
1 Re	frigerant Gases	R410A R404A		8.1 kg	1,924 kg CO2e.kg 3,943 kg CO2e.kg	Defra: Refrigerant & Other (2024) Defra: Refrigerant & Other (2024)	15.58 2023-24 - 2023-24
1 Re	frigerant Gases	R407C R22		kg 1.0 kg	1,624 kg CO2e.kg 1,810 kg CO2e.kg	Defra: Refrigerant & Other (2024) Defra: Refrigerant & Other (2023)	- 2023-24 1.81 2023-24
	frigerant Gases frigerant Gases	R453a R422A		kg 0.9 kg	1,765 kg CO2e.kg 2,847 kg CO2e.kg	https://nationalref.com/products/r453a/ (31/8/2022) Defra: Refrigerant & Other (2024)	- 2023-24 2.55 2023-24
1 Bu	isiness travel (owned vehicles)	R422D Petrol		kg 1,284 litres	2,729 kg CO2e.kg 2.0844 kg CO2e.litre	Defra: Refrigerant & Other (2023) Defra: Fuels - Petrol Diesel (average biofuel blend) 2024	- 2023-24 2.68 2023-24
2 Ele	ectricity (National Grid)	Diesel City Campus	City Campus	2,206 litres 4,393,276 kWh	2.5128 kg CO2e.litre 0.2071 kg CO2e.kWh	Defra: Fuels - Diesel (average biofuel blend) 2024 Defra: UK electricity 2024	5.54 2023-24 909.63 2023-24
2 Ele	ectricity (National Grid)	C. Court C. Court London	C. Court - P1 C. Court - P2 40-48 Fashion St.	872,555 kWh 271,718 kWh 222,863 kWh	0.2071 kg CO2e.kWh 0.2071 kg CO2e.kWh 0.2071 kg CO2e.kWh	Defra: UK electricity 2024 Defra: UK electricity 2024 Defra: UK electricity 2024 Defra: UK electricity 2024	180.66 2023-24 56.26 2023-24 46.14 2023-24
2 Ele	ectricity (National Grid)	London	Unit 2.3 - 11-28 Fashion St top floor Unit 2 - 11-28 Fashion St ground floor	3,063 kWh 6,793 kWh	0.2071 kg CO2e.kWh 0.2071 kg CO2e.kWh 0.2071 kg CO2e.kWh	Defra: UK electricity 2024 Defra: UK electricity 2024	0.63 2023-24
2 Ele	ectricity (National Grid)	London Glasgow	120 Vallance Rd.	50,333 kWh 28,077 m3	0.2071 kg CO2e.kWh 0.1000 kg CO2e.m3	Defra: UK electricity 2024 PBCCD Template EF(2024)	<u>10.42</u> 2023-24 2.81 2023-24
		London HESCET dataset (redacted - no Capital Goods)	GCU London Meter Readings	22 m3 HESCET kgCO2	0.1531 kg CO2e.m3	DEFRA: Water Supply 2024 HESCET Spreadsheet 2023-24	0.00 2023-24 13,267.00 2023-24
3 Ca	apital Projects apital Equipment	HESCET dataset (redacted - Capital Goods only)	urchase inc. Apple", "Laboratory Capital Equipment" and "Medie	HESCET kgCO2 HESCET kgCO2	e. HESCET kgCO2e.£ e. HESCET kgCO2e.£	HESCET Spreadsheet 2023-24 HESCET Spreadsheet 2023-24	729.00 2023-24 1,065.00 2023-24
3 Ele	ectricity (T&D losses - National Grid) ectricity (T&D losses - National Grid)	All Glasgow All London	Glasgow London	5,537,549 kWh 283,067 kWh	0.0183 kg CO2e.kWh 0.0183 kg CO2e.kWh	Defra: T&D - UK Electricity 2024 Defra: T&D - UK Electricity 2024	101.34 2023-24 5.18 2023-24
3 Ele	ectricity (purchased) WTT	All Glasgow All London All Glasgow	Glasgow London	5,537,549 kWh 283,067 kWh 5,537,549 kWh	0.0459 kg CO2e.kWh 0.0459 kg CO2e.kWh	DEFRA: WTT UK electricity (generation) 2024 DEFRA: WTT UK electricity (generation) 2024	254.17 2023-24 12.99 2023-24 21.98 2023-24
3 Ele	ectricity WTT for T&D losses	All London All	Glasgow London	283,067 kWh 24,058,194 kWh	0.0040 kg CO2e.kWh 0.0040 kg CO2e.kWh 0.0302 kg CO2e.kWh	DEFRA: WTT UK electricity (T&D) 2024 DEFRA: WTT UK electricity (T&D) 2024 DEFRA: WTT Fuels 2024	1.12 2023-24 726.80 2023-24
3 Pet	trol (purchased) WTT	Petrol - All Diesel - All		1,284 litres 2,206 litres	0.5809 kg CO2e.litre 0.6110 kg CO2e.litre	DEFRA: WTT Fuels 2024 DEFRA: WTT Fuels 2024 DEFRA: WTT Fuels 2024	0.75 2023-24 1.35 2023-24
3 Wa	aste & Recycling (C&I) - London	Landfill Mixed Recycling	Estimated - London Estimated - London	0.95 tonnes	kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	- 2023-24 0.01 2023-24
3 Wa	aste & Recycling (C&I) - London	Combustion Landfill - SAMPRO/GW	Estimated - London Estimated - Glasgow	7.80 tonnes tonnes	6.4106 kg CO2e.tonne kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.05 2023-24 - 2023-24
3 Wa	aste & Recycling (C&I) - Campus	Combustion Mixed Recycling	Glasgow Glasgow	3.90 tonnes 174.54 tonnes	6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.03 2023-24 1.12 2023-24
3 Wa	aste & Recycling (C&I) - Campus	Organic: Food & drink waste - AD Glass - Recycling	Glasgow Glasgow	11.78 tonnes 1.63 tonnes 8.43 tonnes	8.8839 kg CO2e.tonne 6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.10 2023-24 0.01 2023-24 0.05 2023-24
3 Wa	aste & Recycling (C&I) - Campus	Paper - Recycling Metal - Recycling Cardboard - Recycling	Glasgow Glasgow Glasgow	15.49 tonnes 8.22 tonnes	6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 Defra: Waste Disposal 2023	0.05 2023-24 0.10 2023-24 0.05 2023-24
3 Wa	aste & Recycling (C&I) - Campus aste & Recycling (C&I) - Campus aste & Recycling (C&I) - Campus	Wood - Recycling WEEE - mixed - recycling	Glasgow Glasgow	23.42 tonnes 14.77 tonnes	6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.15 2023-24 0.09 2023-24
3 Wa	aste & Recycling (Municipal) - CCourt	Landfill Combustion	Estimated Estimated	tonnes 102.27 tonnes	kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	- 2023-24 0.66 2023-24
3 Wa 3 Wa	aste & Recycling (Municipal) - Ccourt aste & Recycling (Municipal) - Ccourt	Organic: Food & drink waste - AD Mixed Recycling	Estimated Estimated	40.07 tonnes	kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	- 2023-24 0.26 2023-24
3 Wa 3 Wa	aste & Recycling (C&D) - Campus aste & Recycling (C&D) - Campus	Wood - recycling Metal: scrap metal - recycling	Glasgow Glasgow	4.40 tonnes 4.70 tonnes	6.4106 kg CO2e.tonne 0.9849 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.03 2023-24 0.00 2023-24
3 Wa	aste & Recycling (C&D) - Campus aste & Recycling (C&D) - Campus	Plastics: average plastics - recycling (open loop) Plasterboad - recycling	Glasgow Glasgow	0.30 tonnes 8.20 tonnes	6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.00 2023-24 0.05 2023-24
3 Wa	aste & Recycling (C&D) - Campus	Average construction - recycling (open loop) WEEE - mixed - recycling Combustion	Glasgow Glasgow Glasgow	40.88 tonnes 0.10 tonnes 0.32 tonnes	0.9849 kg CO2e.tonne 6.4106 kg CO2e.tonne 6.4106 kg CO2e.tonne	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 Defra: Waste Disposal 2024	0.04 2023-24 0.00 2023-24 0.00 2023-24
3 Wa	aste & Recycling (C&D) - Campus	Average construction - landfill Glasgow	Glasgow Glasgow Glasgow	0.32 tonnes 0.30 tonnes 26,673 m3	6.4106 kg CO2e.tonne 1.2339 kg CO2e.tonne 0.19000 kg CO2e.m3	Defra: Waste Disposal 2024 Defra: Waste Disposal 2024 PBCCD Template EF(2024)	0.00 2023-24 0.00 2023-24 5.07 2023-24
3 Wa 3 Tra	astewater avel (business - not owned)	London Grey fleet - Average car - unknown	Glasgow	21 m3 23,386 miles	0.1857 kg CO2e.m3 0.2686 kg CO2e.mile	DEFRA: water treatment 2024 Defra: Business travel - land (cars (average - unknown)) 2024	0.00 2023-24 6.28 2023-24
3 Tra 3 Tra	avel (business - not owned) avel (business - not owned)	Grey fleet - Average car - unknown Grey fleet - Average motorbike	London	268 miles miles	0.2686 kg CO2e.mile kg CO2e.mile	Defra: Business travel - land (cars (average - unknown)) 2024 Defra: Business travel - land (motorbike - average) 2024	0.07 2023-24 - 2023-24
3 Tra	avel (business - not owned)	Hired – Medium petrol car Hired – Medium diesel car		57,024 miles 8,956 miles	0.2853 kg CO2e.mile 0.2705 kg CO2e.mile	Defra: Business travel - land (cars (by size)) 2024 Defra: Business travel - land (cars (by size)) 2024 Defra: Business travel - land (cars (by size)) 2024	16.27 2023-24 2.42 2023-24
3 Tra		Hired – Medium hybrid car Hired - Medium PHEV Hired – Medium BEV		2,354 miles 187 miles miles	0.1849 kg CO2e.mile 0.1488 kg CO2e.mile	Defra: Business travel - land (cars (by size)) 2024 Defra: Business travel - land (cars (by size)) 2024 Defra: Business travel - land (cars (by size)) 2024	0.44 2023-24 0.03 2023-24
3 Tra	avel (business - not owned)	Hired – Medium BEV Taxis - Black Cab Coach	Glasgow	miles 17363.202 km km	0.0744 kg CO2e.mile 0.3060 kg CO2e.km kg CO2e.mile	Defra: Business travel - land (cars (by size)) 2024 Defra: Business travel - taxi - black cab - km (2024) Defra: Business travel - land - bus 2024	- 2023-24 5.31 2023-24 - 2023-24
3 Tra	avel (business - not owned)	Air - D - Average Air - D - Economy	Glasgow	km 321,627 km	kg CO2e.mie kg CO2e.pass.km 0.2726 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	- 2023-24 - 2023-24 87.67 2023-24
		Air - D - Economy Air - D - Premium economy	London Glasgow	33,270 km 1,108 km	0.2726 kg CO2e.pass.km 0.2726 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	9.07 2023-24 0.30 2023-24
3 Tra		Air - D - Business Air - SH - Average	Glasgow	2,903 km	0.2726 kg CO2e.pass.km kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	0.79 2023-24 - 2023-24
3 Tra	avel (business - not owned)	Air - SH - Economy Air - SH - Economy	Glasgow London	556,426 km 27,090 km	0.1829 kg CO2e.pass.km 0.1829 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	101.75 2023-24 4.95 2023-24
3 Tra		Air - SH - Business Air - SH - Business Air - LH - Average	Glasgow London	1,768 km - km	0.2743 kg CO2e.pass.km 0.2743 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	0.48 2023-24 - 2023-24
3 Tra	avel (business - not owned) avel (business - not owned) avel (business - not owned)	Air - LH - Average Air - LH - Economy Air - LH - Economy	Glasgow	44,592 km	kg CO2e.pass.km 0.2001 kg CO2e.pass.km 0.2001 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	- 2023-24 258.46 2023-24 8.92 2023-24
3 Tra	avel (business - not owned) avel (business - not owned) avel (business - not owned)	Air - LH - Premium economy Air - LH - Premium economy	Glasgow	115,184 km 5,706 km	0.3202 kg CO2e.pass.km 0.3202 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	36.88 2023-24 1.83 2023-24
3 Tra	avel (business - not owned)	Air - LH - Business Air - LH - Business	Glasgow London	77,339 km 5,706 km	0.5803 kg CO2e.pass.km 0.5803 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	44.88 2023-24 3.31 2023-24
		Air - LH - First Air - Int - Average		km km	kg CO2e.pass.km kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	- 2023-24 - 2023-24
3 Tra		Air - Int - Economy Air - Int - Economy	Glasgow London	1,386,896 km 14,572 km	0.1347 kg CO2e.pass.km 0.1347 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	186.75 2023-24 1.96 2023-24
3 Tra		Air - Int - Premium economy Air - Int - Business	Glasgow Glasgow	10,970 km 37,616 km	0.2154 kg CO2e.pass.km 0.3904 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	2.36 2023-24 14.69 2023-24
3 Tra	avel (business - not owned)	Air - Int - First Rail - National Rail - National	TMC - Glasgow TMC - London	819,519 km 73,492 km	kg CO2e.pass.km 0.0355 kg CO2e.pass.km 0.0355 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - rail 2024 Defra: Business travel - rail 2024	- 2023-24 11.33 2023-24 2.61 2023-24
3 Tra	avel (business - not owned)	Rail - National Rail - National Rail - National	i-expenses - Glasgow i-expenses - London	233,020 km 7,162 km	0.0355 kg CO2e.pass.km 0.0355 kg CO2e.pass.km 0.0355 kg CO2e.pass.km	Defra: Business travel - rail 2024 Defra: Business travel - rail 2024 Defra: Business travel - rail 2024	8.26 2023-24 0.25 2023-24
3 Tra		Rail - International Rail - International	TMC - Glasgow TMC - London	746 km	0.0045 kg CO2e.pass.km 0.0045 kg CO2e.pass.km	Defra: Business travel - rail 2024 Defra: Business travel - rail 2024	0.00 2023-24 - 2023-24
3 Tra	avel (business - not owned)	Rail - International Rail - International	i-expenses Glasgow i-expenses - London	19,151 km - km	0.0045 kg CO2e.pass.km 0.0045 kg CO2e.pass.km	Defra: Business travel - rail 2024 Defra: Business travel - rail 2024	0.09 2023-24
3 Tra	avel (business - not owned)	Air - SH - Economy Air - LH - Economy	Int. Mob. (Int. Office) Int. Mob. (Int. Office)	174,399 km 391,752 km	0.1829 kg CO2e.pass.km 0.2001 kg CO2e.pass.km	Defra: Business travel - air - with RF 2024 Defra: Business travel - air - with RF 2024	31.89 2023-24 78.39 2023-24
3 Tra		Hotel nights - aggregated Hotel nights - aggregated	TMC - Glasgow TMC - London		kg CO2e.room.night kg CO2e.room.night	Defra: Hotel 2024 Defra: Hotel 2024	42.21 2023-24 1.44 2023-24
3 Tra	avel (hotels) avel (business - not owned) - WTT avel (business - not owned) - WTT	Hotel nights - aggregated Grey fleet - Average car - unknown - WTT Grey fleet - Average car - unknown - WTT	i-expenses Glasgow London	23,386 miles 268 miles	0.0708 kg CO2e.mile	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	2023-24 1.66 2023-24 0.02 2023-24
3 Tra		Grey fleet - Average motorbike - WTT Hired – Medium petrol car - WTT		- miles 57,024 miles	kg CO2e.mile	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	- 2023-24 4.55 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Hired – Medium diesel car - WTT Hired – Medium hybrid car - WTT		8,956 miles 2,354 miles	0.0660 kg CO2e.mile 0.0482 kg CO2e.mile	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	0.59 2023-24 0.11 2023-24
3 Tra	avel (business - not owned) - WTT	Hired - Medium PHEV - WTT Hired – Medium BEV - WTT		187 miles - miles	0.0406 kg CO2e.mile 0.0165 kg CO2e.mile	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	0.01 2023-24 - 2023-24
3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT avel (business - not owned) - WTT	Taxis - Black Cab - WTT Coach - WTT	Glasgow	17,363 km - km	0.0763 kg CO2e.km kg CO2e.mile	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	1.33 2023-24 - 2023-24 - 2023-24
3 Tra	avel (business - not owned) - WTT	Air – D - Average - WTT Air – D - Economy - WTT Air – D - Economy - WTT	Glasgow London	km 321,627 km 33,270 km	kg CO2e.pass.km 0.0335 kg CO2e.pass.km 0.0335 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	- 2023-24 10.77 2023-24 1.11 2023-24
3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Air – D - Premium economy - WTT Air - D - Business - WTT	Glasgow Glasgow	1,108 km 2,903 km	0.0335 kg CO2e.pass.km 0.0335 kg CO2e.pass.km 0.0335 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	0.04 2023-24 0.10 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Air - SH - Average - WTT Air - SH - Economy - WTT	Glasgow	- km 556,426 km	kg CO2e.pass.km 0.0225 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	- 2023-24 12.51 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Air - SH - Economy - WTT Air - SH - Business - WTT	London Glasgow	27,090 km 1,768 km	0.0225 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	0.61 2023-24 0.06 2023-24
3 Tra	avel (business - not owned) - WTT	Air - SH - Business - WTT Air - LH - Average - WTT Air - LH - Economy - WTT	Glasgow	- km - km 1,291,593 km	0.0337 kg CO2e.pass.km kg CO2e.pass.km 0.0246 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	- 2023-24 - 2023-24 31.79 2023-24
3 Tra	avel (business - not owned) - WTT	Air - LH - Economy - WTT Air - LH - Economy - WTT Air - LH - Premium economy - WTT	London Glasgow	44,592 km 115,184 km	0.0246 kg CO2e.pass.km 0.0246 kg CO2e.pass.km 0.0394 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	1.10 2023-24 4.53 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Air - LH - Premium economy - WTT Air - LH - Business - WTT	London Glasgow	5,706 km 77,339 km	0.0394 kg CO2e.pass.km 0.0714 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	0.22 2023-24 5.52 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Air - LH - Business - WTT Air - LH - First - WTT	London	5,706 km - km	0.0714 kg CO2e.pass.km kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	0.41 2023-24 - 2023-24
3 Tra	avel (business - not owned) - WTT	Air - Int - Average - WTT Air - Int - Economy - WTT	Glasgow	- km 1,386,896 km	kg CO2e.pass.km 0.0166 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024)	- 2023-24 22.97 2023-24
3 Tra	avel (business - not owned) - WTT	Air - Int - Economy - WTT Air - Int - Premium economy - WTT Air - Int - Business - WTT	London Glasgow Glasgow	14,572 km 10,970 km 37,616 km	0.0166 kg CO2e.pass.km 0.0265 kg CO2e.pass.km 0.0480 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- business stravel- air with RF (2024)	0.24 2023-24 0.29 2023-24 1.81 2023-24
3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT avel (business - not owned) - WTT	Air - Int - Business - WTT Air - Int - First - WTT Rail – National - WTT	Giasgow TMC - Glasgow	37,616 km - km 319,519 km	0.0480 kg CO2e.pass.km kg CO2e.pass.km 0.0090 kg CO2e.pass.km	WTT- business travel- air with RF (2024) WTT- business travel- air with RF (2024) WTT- pass vehs & travel- air do 2024	1.81 2023-24 - 2023-24 2.87 2023-24
3 Tra 3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Rail – National - WTT Rail – National - WTT	TMC - London i-expenses	73,492 km 233,020 km	0.0090 kg CO2e.pass.km 0.0090 kg CO2e.pass.km	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	0.66 2023-24 2.09 2023-24
3 Tra	avel (business - not owned) - WTT avel (business - not owned) - WTT	Rail - International - WTT Rail - International - WTT	TMC - Glasgow TMC - London	746 km - km	0.0012 kg CO2e.pass.km 0.0012 kg CO2e.pass.km	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	0.00 2023-24 - 2023-24
3 Tra		Rail - International - WTT Air - SH - Economy - WTT	i-expenses Int. Mob. (Int. Office) Int. Mob. (Int. Office)	233,020 km 174,399 km	0.0012 kg CO2e.pass.km 0.0225 kg CO2e.pass.km	WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024 WTT- pass vehs & travel- land 2024	0.27 2023-24 3.92 2023-24
3 Tra	avel (business - not owned) - WTT avel (commuting - staff) avel (commuting - staff)	Air - LH - Economy - WTT Rail - National Underground	Int. Mob. (Int. Office) Glasgow Glasgow	391,752 km 2,551,431 km 65,726 km	0.0246 kg CO2e.pass.km 0.0355 kg CO2e.pass.km 0.0286 kg CO2e.pass.km	WTT- pass vels & travel- land 2024 Defra: Business travel - land - rail (2024) Defra: Business travel - land - rail - light rail and tram (2024)	9.64 2023-24 90.47 2023-24 1.88 2023-24
3 Tra	avel (commuting - staff)	Underground Public bus Car - Average - unknown	Glasgow Glasgow Glasgow	65,726 km 1,120,423 km 1,808,816 km	0.0286 kg CO2e.pass.km 0.1300 kg CO2e.pass.km 0.16691 kg CO2e.km	Defra: Business travel - land - rail - light rail and tram (2024) Defra: Business travel - land - local bus (not London) (2024) Defra: Business travel - land (cars (average - unknown)) 2024	1.88 2023-24 145.64 2023-24 301.91 2023-24
3 Tra 3 Tra	avel (commuting - staff) avel (commuting - staff)	Motorcycle/ Moped (average) Coach	Glasgow Glasgow	19,878 km 96,606 km	0.1137 kg CO2e.pass.km 0.0272 kg CO2e.pass.km	Defra: Business travel - land - motorbike 2024 Defra: Business travel - land - coach 2024	2.26 2023-24 2.62 2023-24
3 Tra 3 Tra	avel (commuting - staff) avel (commuting - staff)	Working from Home Rail - National	Glasgow London	2,483,894 FTE/h 316,456 km	0.3338 kgCO2e.FTE.year 0.0355 kg CO2e.pass.km	DEFRA: Homeworking - Homeworking (office equipment + heating) 2024 Defra: Business travel - land - rail (2024)	829.07 2023-24 11.22 2023-24
3 Tra	avel (commuting - staff) avel (commuting - staff)	Underground Public bus	London	39,683 km 1,509 km	0.0278 kg CO2e.pass.km 0.0745 kg CO2e.pass.km	Defra: Business travel - land - rail - London underground (2024) Defra: Business travel - land - London local bus (2024)	1.10 2023-24 0.11 2023-24
3 Tra		Car - Average - unknown Motorcycle/ Moped (average) Coach	London London	km km	kg CO2e.km kg CO2e.pass.km kg CO2e.pass.km	Defra: Business travel - land (cars (average - unknown)) 2024 Defra: Business travel - land - motorbike 2024 Defra: Business travel - land - crach 2024	- 2023-24 - 2023-24 - 2023-24
3 Tra		Coach Working from Home Rail - National	London London Glasgow	km 1,440,454 FTE/h 25,998,092 km	kg CO2e.pass.km 0.3338 kgCO2e.FTE.year 0.0355 kg CO2e.pass.km	Defra: Business travel - land - coach 2024 DEFRA: Homeworking - Homeworking (office equipment + heating) 2024 Defra: Business travel - land - rail (2024)	- 2023-24 480.79 2023-24 921.89 2023-24
3 Tra 3 Tra	avel (commuting – students) avel (commuting – students)	Underground Public bus	Glasgow Glasgow	410,425 km 23,538,946 km	0.0286 kg CO2e.pass.km 0.1300 kg CO2e.pass.km	Defra: Business travel - Ianu - rain (Light rail and tram (2024) Defra: Business travel - Iano - rain - light rail and tram (2024) Defra: Business travel - Iand - local bus (not London) (2024)	11.74 2023-24 3,059.83 2023-24
3 Tra 3 Tra	avel (commuting – students) avel (commuting – students)	Car - Average - unknown Motorcycle/ Moped (average)	Glasgow Glasgow	6,994,612 km 21,395 km	0.1669 kg CO2e.km 0.1137 kg CO2e.pass.km	Defra: Business travel - land (cars (average - unknown)) 2024 Defra: Business travel - land - motorbike 2024	1,167.47 2023-24 2.43 2023-24
3 Tra	avel (commuting – students) avel (commuting – students)	Coach Rail - National	Glasgow London	3,367,661 km 4,882,480 km	0.0272 kg CO2e.pass.km 0.0355 kg CO2e.pass.km	Defra: Business travel - land - coach 2024 Defra: Business travel - land - rail (2024)	91.50 2023-24 173.13 2023-24
		Underground Public bus	London London	321,890 km 628,083 km	0.0278 kg CO2e.pass.km 0.0745 kg CO2e.pass.km	Defra: Business travel - land - rail - London underground (2024) Defra: Business travel - land - London local bus (2024) Defra: Buriness travel - lond (rac (average), undergown) 2024	8.95 2023-24 46.77 2023-24
3 Tra 3 Tra	students)	Car - Average - unknown Motorcycle/ Moped (average)	London London London	km km 1,616,294 km	kg CO2e.pass.km kg CO2e.pass.km 0.0272 kg CO2e.pass.km	Defra: Business travel - land (cars (average - unknown)) 2024 Defra: Business travel - land - motorbike 2024 Defra: Business travel - land - coach 2024	- 2023-24 - 2023-24 43.91 2023-24
3 Tra 3 Tra 3 Tra 3 Tra 3 Tra	avel (commuting – students)					Defra: Business travel - land - coach 2024 DEFRA: Business Travel - land - bus 2024	43.91 2023-24 9.48 2023-24
3 Tra 3 Tra 3 Tra 3 Tra 3 Tra 3 Tra 3 Tra 3 Tra	avel (commuting – students) avel (commuting – students) avel (end-of-term UK domicilled)	Coach Coach	London	348,858 km	0.0272 kg CO2e.pass.km 0.1669 kg CO2e.pass.km		83.23 2023-24
3 Tra 3 Tra	avel (commuting – students) avel (commuting – students) avel (end-of-term UK domicilled) avel (end-of-term UK domicilled) avel (end-of-term UK domicilled) avel (end-of-term UK domicilled)	Coach Coach Car - Average - unknown Air - D - Average Rail - National		348,858 km 498,649 km 570,707 km 1,913,182 km	0.1669 kg CO2e.pass.km 0.2726 kg CO2e.pass.km 0.0355 kg CO2e.pass.km	DEFRA: Business Travel - land - car - average (unknown) 2024 Defra: Business travel - air (average passenger) with RF 2024 DEFRA: Busines travel - land - rail 2024	83.23 2023-24 155.56 2023-24 67.84 2023-24
3 Tra 3 Tra	avel (commuting – students) avel (commuting – students) avel (end-0-teru UK domicilled) avel (end-0-teru UK domicilled) avel (end-0-teru UK domicilled) avel (end-0-teru UK domicilled) avel (int. stu.) avel (int. stu.)	Coach Coach Car-Average - unknown Air - D - Average Rail - National Air - H - Average Air - SH - Average Air - SH - Average	Glasgow Glasgow	348,858 km 498,649 km 570,707 km 1,913,182 km 48,449,153 km 1,829,228 km	0.1669 kg CO2e.pass.km 0.2726 kg CO2e.pass.km 0.0355 kg CO2e.pass.km 0.2613 kg CO2e.pass.km 0.1859 kg CO2e.pass.km	DEFRA: Business Travel - land - car - average (unknown) 2024 Defra: Business travel - land - cara - sexanger) with RF 2024 DEFRA: Business travel - land - rail 2024 Defra: Business travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024	155.56 2023-24 67.84 2023-24 12,658.79 2023-24 340.09 2023-24
3 Tra 3 Tra	avel (commuting – students) avel (commuting – students) avel (end-0-fterm UK domicilled) avel (end-0-fterm UK domicilled) avel (end-0-fterm UK domicilled) avel (end. stul) avel (int. stu.) avel (int. stu.)	Coach Coach Xar - Verage unknown Air - O - Average Rail - National Air - U - Average Air - Sit - Average	Glasgow	348,858 km 498,649 km 570,707 km 1,913,182 km 48,449,153 km 1,829,228 km 27,633,860 km 109,426 km	0.1669 kg (CO2e.pass.km 0.2726 kg (CO2e.pass.km 0.0355 kg (CO2e.pass.km 0.2613 kg (CO2e.pass.km 0.2613 kg (CO2e.pass.km 0.2614 kg (CO2e.pass.km 0.1859 kg (CO2e.pass.km	DEFRA: Business Travel - and - car - average (unknown) 2024 DEFra: Business travel - ind vareage passenger) with RF 2024 DEFra: Busines travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024	155.56 2023-24 67.84 2023-24 12,658.79 2023-24 340.09 2023-24 7,220.17 2023-24 20.34 2023-24
3 Trr 3 Trr	avel (commuting – students) avel (commuting – students) avel (end-0-fterm UK domicilled) avel (end-0-fterm UK domicilled) avel (end-0-fterm UK domicilled) avel (end. stul) avel (int. stu.) avel (int. stu.)	Coach Coach Gar - Average - unknown Air - D - Average Ail - National Air - LH - Average Air - SH - Average Air - LH - Average	Glasgow Glasgow London	348,858 km 498,649 km 570,707 km 1,913,182 km 48,449,153 km 1,829,228 km 27,633,860 km	0.1669 kg CO2e.pass.km 0.02726 kg CO2e.pass.km 0.0355 kg CO2e.pass.km 0.2613 kg CO2e.pass.km 0.1859 kg CO2e.pass.km 0.2613 kg CO2e.pass.km	DEFRA: Business Travel - land - car - average (unknown) 2024 Defra: Business travel - air (average passenger) with RF 2024 DEFRA: Busines travel - land - rail 20204 Defra: Business travel - air (average passenger) with RF 2024 Defra: Business travel - air (average passenger) with RF 2024	155.56 2023-24 67.84 2023-24 12,658.79 2023-24 340.09 2023-24 7,220.17 2023-24

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