

# Carbon Footprint Methodology and Calculations



# Executive Summary

Since 2020 we have reported our carbon emissions annually in line with the Greenhouse Gas Protocol reporting guidelines.

In 2021, we updated our commitments to net zero carbon to align with the latest science under the UN Race to Zero through the SME Climate Hub. As such, we have incorporated our scope 3 emissions into our targets two years earlier than our previous commitment to do so by 2023, have set a short-term reduction target to half our emissions by 2030 (against a 2019 baseline) plus a long-term target for a 90% reduction by 2040.

We estimated home working emissions in 2021, however from 2022, the methodology has now moved within the UK Government Carbon Factors for Company Reporting and is informed by our annual staff survey.

The downstream impacts from our projects are currently excluded from this assessment, but we acknowledge that these are significant. Our Architects Declare Statement and B Corp Impact Reports outline our actions and commitments to reduce these project related impacts in terms of embodied carbon, operational energy and wider environmental impacts.

Our 2025 calendar year net emissions have stayed approximately the same with only a very slight increase compared to 2024. They still sit at 4% below the baseline year, demonstrating that our current action plan needs to be refined. Increased uptake of our electric car benefit scheme and promoting the use of public transport should result in emissions decreasing towards the required 2030 near-term target.

We have made good progress in scope 2 emissions with the switch to a 100% green tariff, however this is eclipsed by our scope 3 business travel and commuting emissions. This is the number 1 challenge, with over 80% of our emissions being made up of this category. 60% of our business travel emissions could be significantly reduced through modal change. Examples of this include switching from flights to ferries and trains and moving from petrol and diesel cars to public transport, low emission vehicles or active travel. This is a behaviour change problem.

We have chosen to purchase international carbon offsets supporting a low carbon energy transition to be Carbon Neutral in operation and also to invest in UK woodland creation and peatland restoration which has biodiversity, flood prevention and amenity benefits initially as well as longer term carbon benefits.

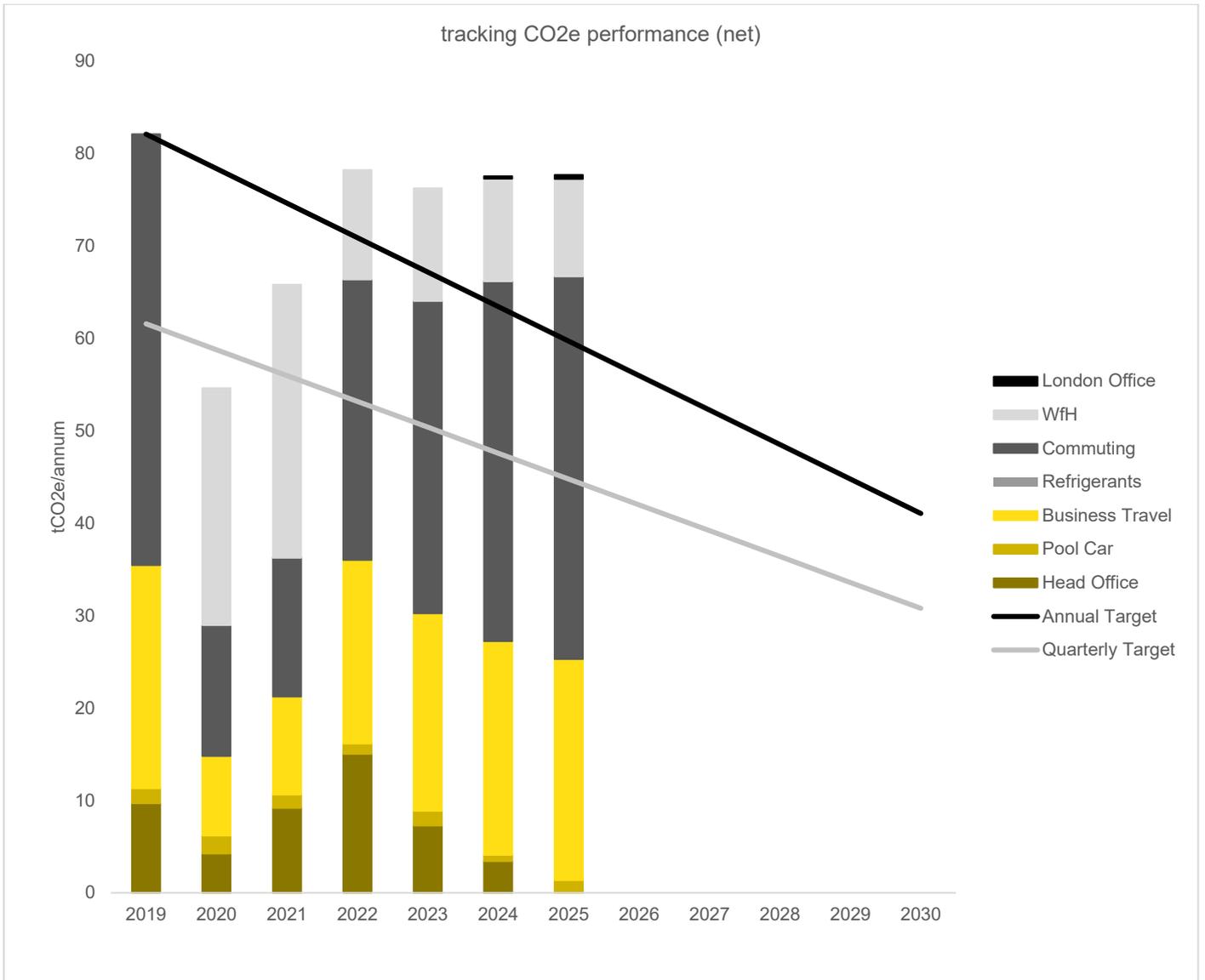


Figure 1: Reported emissions compared with near term target reduction pathway



# Introduction

In 2020, we committed to monitoring our carbon footprint, setting reduction targets and progressing on a journey to become net zero carbon as a business. We have chosen to record and report carbon data per calendar year (Jan – Dec). Our methodology is aligned to the Greenhouse Gas Protocol [GHGP] and identifies scope 1, scope 2 and scope 3 emissions.

In 2021, we updated our commitments to net zero carbon to align with the latest science under the UN Race to Zero through the SME Climate Hub. As such, we have incorporated our scope 3 emissions into our targets two years earlier than our previous commitment to do so by 2023, have set a short-term reduction target to half our emissions by 2030 (against a 2019 baseline) plus a long-term target for a 90% reduction by 2040.

We estimated home working emissions in 2021. This methodology has now moved within the UK Government Carbon Factors for Company Reporting from 2022 and is informed by our annual staff survey.

The downstream impacts from our projects are currently excluded from this assessment, but we acknowledge that these are significant. Our Architects Declare Statement and B Corp Impact Reports outline our actions and commitments to reduce these project related impacts in terms of embodied carbon, operational energy and wider environmental impacts.

Our Environmental Management System has been certified in accordance with ISO14001 and is integrated within a comprehensive practice management system to better capture environmental and social key performance indicators across our projects. This work shall lay the foundations to facilitate reporting of downstream project impacts in the future.

In 2024, we switched office energy tariff, so all supplies are now good quality renewable energy tariffs. In the same year, we changed our pool car to a plugin hybrid. We also continue to publicise and encourage up-take of electric cars on salary sacrifice, following the launch of the “Re-loved” option bringing lower cost electric car leases.

# Emission Sources: identification

## Scope 1 (direct) and 2 (indirect) emissions

Reporting of scope 1 and 2 emissions is mandatory under the GHGP.

### Scope 1: company facilities and company vehicles

Throughout 2025 we have been located in a single office location in leased office space, fitted out to our own specification. General heating and cooling are provided by the Landlord, however our demise' consumption for landlord core building services is sub metered, as such emissions relating to general heating and cooling are included within our calculation.

Throughout 2025 the landlord supplied electricity has been from a good quality renewable tariff.

In addition to the Landlord systems, we have 5 wall mounted air conditioning units with associated power inverter heat pump to control the temperature of our server and meeting rooms. The 5 wall mounted meeting room systems have been added to the existing landlord Mitsubishi VRF which has R32 refrigerant charge.

The server room system has two outdoor units and two indoor units each with a 4kg R32 refrigerant charge, so a total of 8kg, the system shall be serviced annually with any additional refrigerant charge required being recorded.

We directly 'own' (leasehold) one pool car, available to all for business travel. Mileage is recorded for all journeys. The current pool car is an Audi A3 plugin hybrid. Details of previous vehicles remain available via historic lease details.

### Scope 2: purchased electricity

We hold two electrical connections with both meters directly supplying the office and billed directly to us from our supplier.

We have no systems that use gas or steam.

From July 2022 one of our metered supplies is provided with good quality renewable tariff electricity, allowing us to report our emissions gross and net (excluding good quality renewable energy consumed). In September 2024, we switched to an all green tariff electricity source.

We are recharged by the landlord for our share of the Variable Refrigerant Flow pant, and this energy is on good quality green tariff.

## Scope 3 (indirect) emissions

Scope 3 (indirect, upstream, and downstream) emissions

Reporting of scope 3 emissions is optional under the GHGP.

Transmission and distribution of purchased electricity will be included in our scope 3 emissions.

We have chosen to calculate scope 3 emissions relating to business travel as the greatest non mandatory material factor in our overall carbon footprint as an SME consulting business.

Since July 2022 the EMS captures data regarding our business travel in a manner that now allows accurate carbon equivalent calculation.

Following changes towards a fully hybrid office environment from September 2021 we have chosen to expand our scope 3 emissions reporting to include an estimate for commuting and also for any increases in staff home energy consumptions that may occur due to home working.

Our 2021 sustainability survey was used to capture a snapshot of employees typical commuting transport modes and distances, alongside details of their living arrangements to help to inform estimates of any increases in energy use due to home working. Our calculations of home working impacts follow the Homeworking Emissions Whitepaper 2020 (By EcoAct in partnership with Lloyds Banking Group and NatWest Group) now incorporated within UK Government Carbon Factors for Company Reporting.

We opened a satellite London office in July 2024, currently operating of a serviced office space. The landlord of this space provides us with a breakdown of our scope 3 emissions.



# Results

## Scope 1 emissions, kgCO<sub>2</sub>e

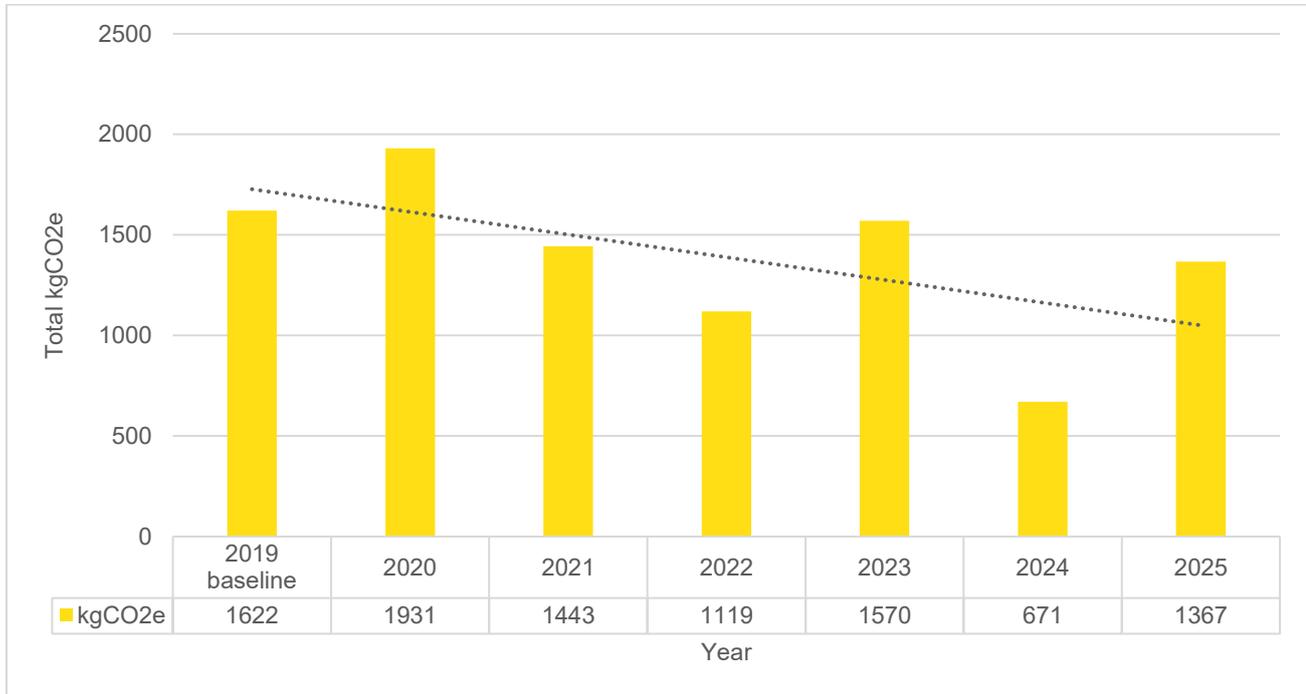


Figure 2: Reported scope 1 emissions since baseline

## Scope 2 emissions, kgCO<sub>2</sub>e

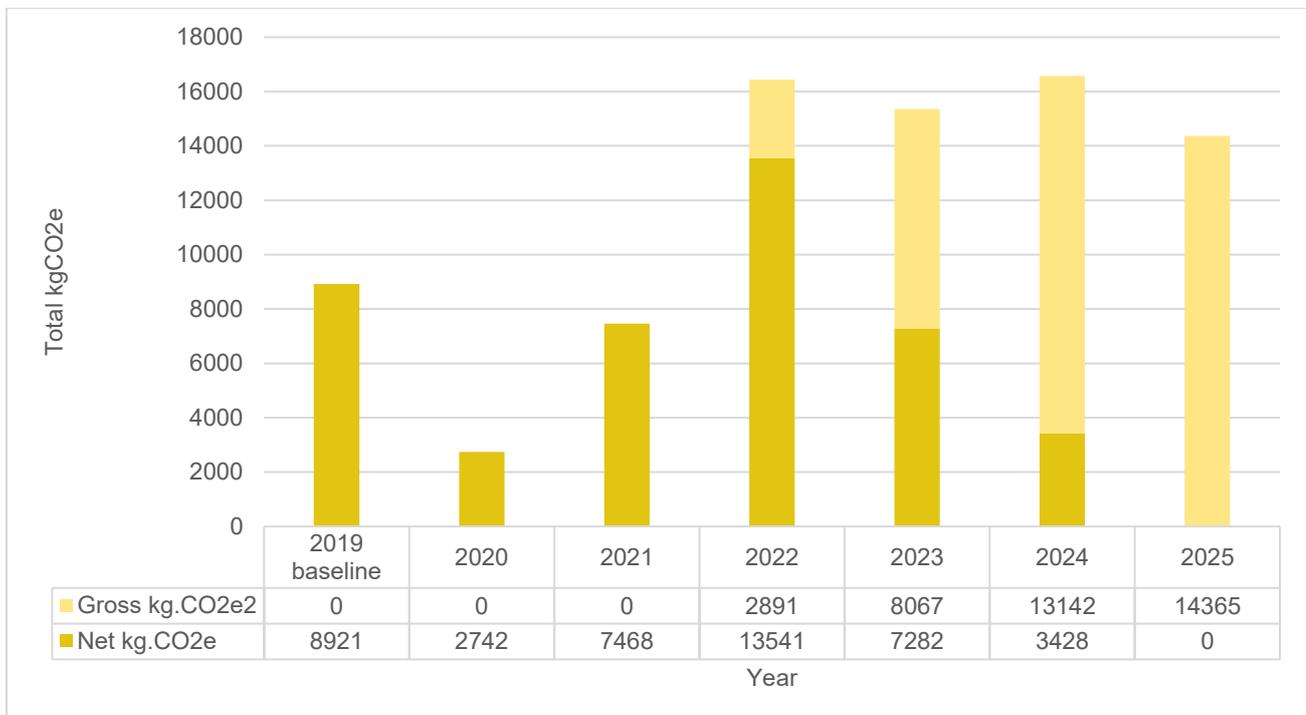


Figure 3: Reported scope 2 emissions since baseline

### Scope 3 emissions, kgCO<sub>2</sub>e – electricity transmission & distribution, business travel, commuting & working from home

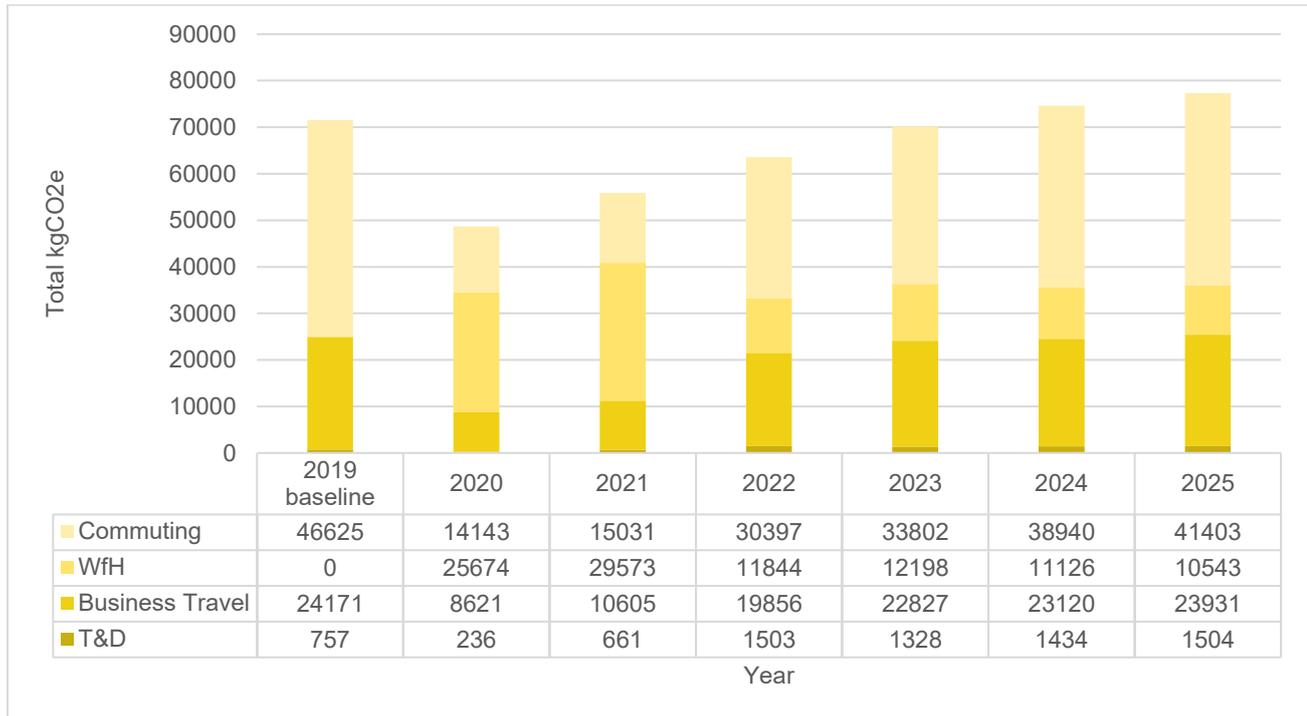


Figure 4: Reported scope 3 emissions since baseline

### Total emissions, kgCO<sub>2</sub>e – scope 1, 2 (net) and 3 combined

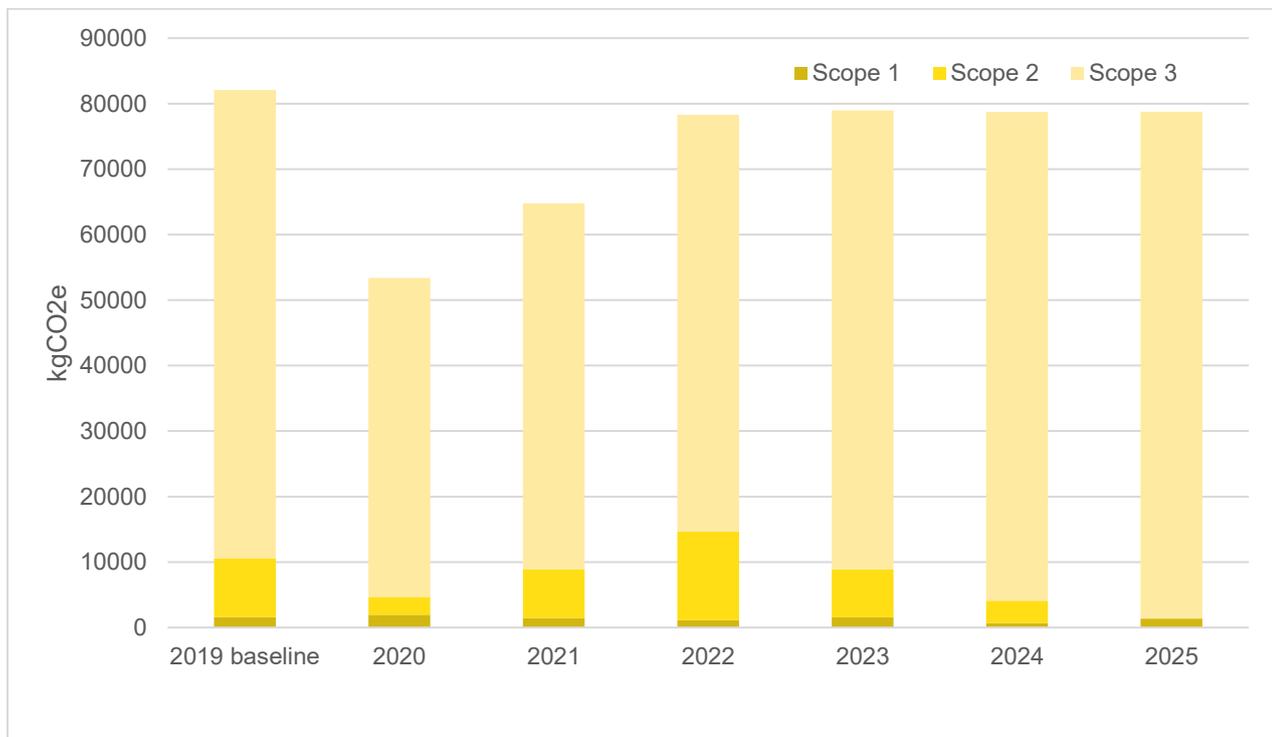


Figure 5: Reported scope 1 – 3 total (net) emissions since baseline

	Scope 1 kgCO <sub>2</sub> e	Scope 2 (net) kgCO <sub>2</sub> e	Scope 3 kgCO <sub>2</sub> e	Total kgCO <sub>2</sub> e	% change year on year	% change cumulative
<b>2019 Baseline</b>	1622	8921	71554	82067	0	0
<b>2020</b>	1931	2742	48673	53346	-35%	-35%
<b>2021</b>	1443	7468	55871	64782	+21%	-21%
<b>2022</b>	1119	13541	63601	78261	+21%	-5%
<b>2023</b>	1569	7282	70115	78966	+1%	-4%
<b>2024</b>	671	3428	74620	78719	0%	-4%
<b>2025</b>	1367	0	77381	78748	0%	-4%

### Total emissions, kgCO<sub>2</sub>e target comparison

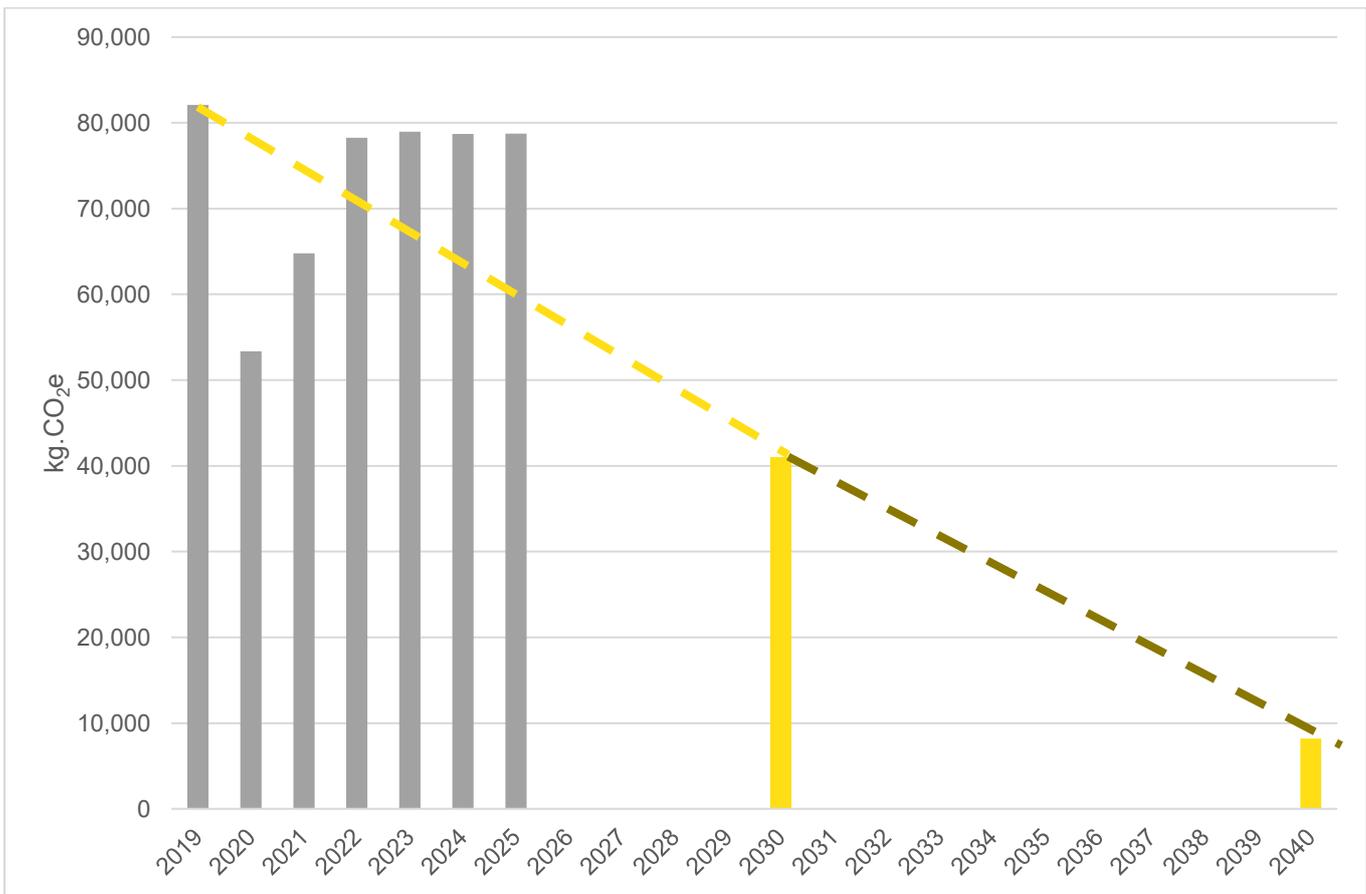


Figure 6: Reported total (net) emissions since baseline compared to near and long term targets

So far, we have spent approximately 51.9% of our total carbon budget between 2019 and 2040. If we see no change in our carbon emissions, we will have spent our total budget by 2030, 10 years earlier than targeted. This highlights the urgency to reduce our scope 3 emissions, primarily employee commuting and business travel which are currently the largest contributors.



# Offsetting

Carbon offsetting presents an opportunity, beyond emission reductions, to develop a broader value proposition that is aligned to long-term business strategies and supports the UK and global transition to net zero.

Whilst the emphasis remains firmly on reducing emissions as a priority step, initiatives such as WorldGBC's Net Zero Carbon Buildings Commitment and Science Based Targets recognise that carbon offsets can play a critical role in the transition towards a state of net zero emissions.

Ref. UKGBC Renewable Energy Procurement and Carbon Offsetting March 2021

Carbon offsets must meet the following principles to safeguard quality and environmental integrity:

1. Real
2. Avoid leakage
3. Measurable
4. Permanence
5. Additional
6. Independently Verified
7. Unique
8. Avoid social & environmental harm

We have chosen a dual approach to carbon offsets, both of which have been made based on our total 2025 carbon emissions.

We are investing in international energy transition offsets supporting a low carbon transition in emerging economies.

We are also supporting a range of UK based nature protection, creation and restoration schemes.

All carbon offsets are purchased through Climate Impact Partners from funds made up of schemes verified to an international or national standard to ensure that they meet the UKGBC principles to safeguard quality and environmental integrity.

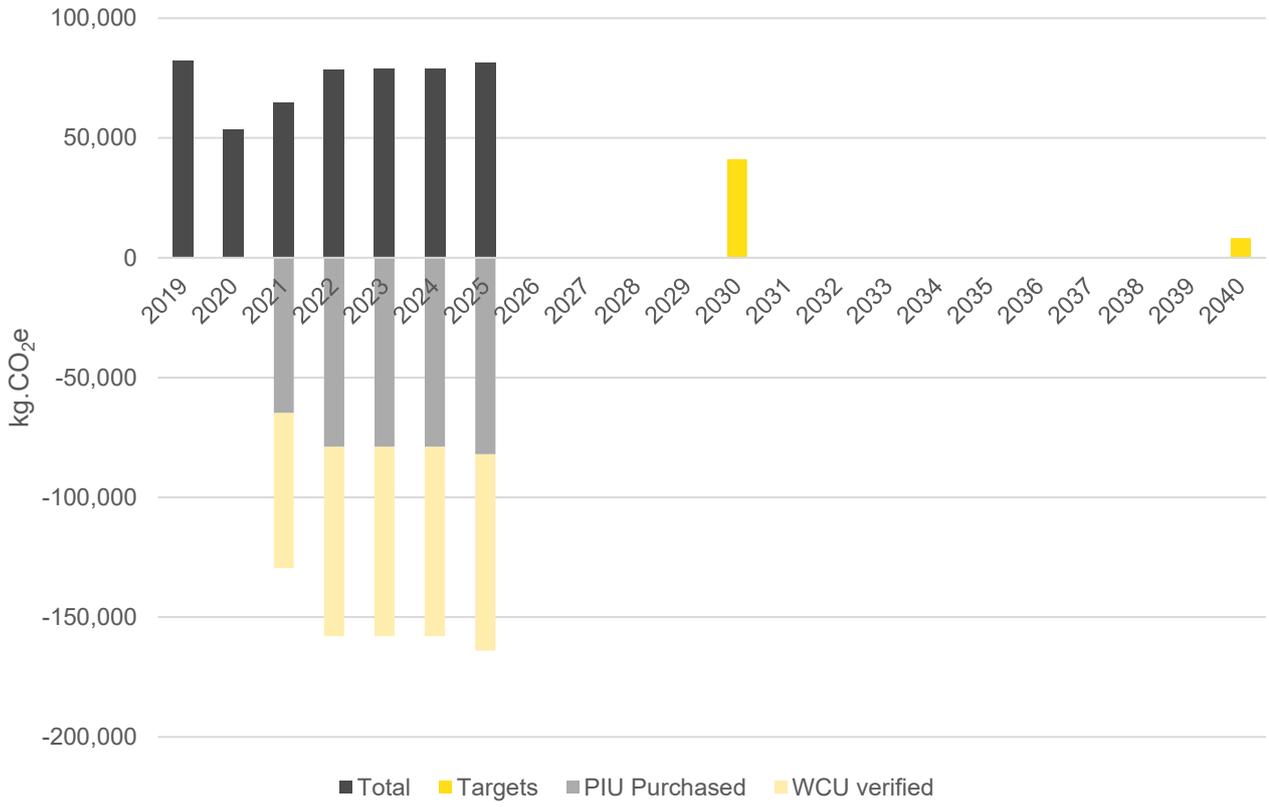


Figure 7: Carbon emissions and offsets compared to near and long term targets.



# Reduction actions

The number 1 challenge is travel. We considered investing in SAFc (Sustainable Aviation Fuel Credits) to mitigate flight emissions, although this would promote market-based systems to decarbonise aviation it would not tackle behavioural change and would set a precedent that high carbon impact travel can simply be offset.

Our previous initiatives reported in this document have not been effective in overcoming the increase in travel impacts around increased economic activity. So, a more thorough action plan and sweeping range of initiatives is required.

We are going to develop a 2-year action plan with a number of initiatives to promote behaviour change to tackle our growing problem with transport related emissions. This action plan shall be aligned with the business planning period July to June.

The action plan will focus on SMART targets with the aim of encouraging behaviour change through rewarding staff making lower carbon transport decisions and introducing policies and procedures to stop the most polluting forms of business travel.



# Appendix A

## Calculation Methodology

Carbon equivalent conversion factors are taken from UK government data:

<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

Relevant conversion factors have been used for each reported year as noted.

Accuracy of data is critical for truthful reporting. We will continue to refine our data capture and reporting to ensure the highest levels of accuracy.

Scope	Source	Measure	Notes	Data accuracy
1	Server heat pump / cooling system	Mass (kg) of gas top up required at annual service	Service reports available for 2015 onwards. No reported top up gas; 2 possible answers: 1. No leakage 2. Small leakage below levels deemed reportable Office manager to request that ANY top up is noted in future	Med
1	Pool car	Distance travelled (m / km)	Full diary of use available broken down per journey, job number and date. Vehicle type known	High
2	Electricity	Energy consumption (kwh)	Sub metered for office space	High
3	Electricity transmission and distribution	Energy consumption (kwh)	Sub metered for office space	High
3	Business travel – car	Distance travelled (km)	<i>Pre-July 2022</i> Milage recorded but no data regarding vehicle type, size or fuel source per journey <i>Post-July 2022</i> Milage and vehicle fuel type reported.	Med
3	Business travel – train	Distance travelled (km)	<i>Pre-July 2022</i> No record of milage or type of train system. Cost recorded only <i>Post-July 2022</i> Journey milage recorded.	Med
3	Business travel - air	Distance travelled (km)	<i>Pre-July 2022</i> No record of milage or type of airline / class. Cost recorded only <i>Post-July 2022</i> Journey milage & type recorded.	Med
3	Business travel - taxi	Distance travelled (km)	<i>Pre-July 2022</i>	Med

			No record of milage or vehicle type, size or fuel source per journey. Cost recorded only. <i>Post-July 2022</i> Journey milage & type recorded.	
3	Business travel - tram	Distance travelled (km)	<i>Pre-July 2022</i> No record of milage. Cost recorded only <i>Post-July 2022</i> Journey milage recorded.	Med
3	Business travel – London underground	Distance travelled (km)	<i>Pre-July 2022</i> No record of milage. Cost / travel card top up cost recorded only <i>Post-July 2022</i> Journey milage recorded.	Med
3	Commuting	Distance travelled (km)	Survey collected employee typical commuting distances and mode of transport. <i>Post-July 2024</i> Data is split into individual car types for more accurate analysis	Med
3	Home Office	None	Although survey carried out to enhance accuracy of calculations for correction factor it is not based on measured data.	Low
3	London Office	kgCO2e	The landlord collects and measures the data. The distribution per office is then estimated.	Med

All kgCO<sub>2</sub>e figures rounded to the nearest whole number when reporting.

# Appendix B

## Calculation Summary

Calculation summary provided from revised baseline year 2019 onwards. Please see 2020 Carbon Report for calculations summary of preceding years.

### Scope 1 emissions

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2019	Pool car (m)	6,559	0.24736	1622	Small car, petrol (1.0 focus)
	Server cooling (kg)	0	2088	0	R410A refrigerant gas
			<b>Total</b>	<b>1622</b>	
2020	Pool car (m)	8,087	0.23877	1931	Small car, petrol (1.0 focus)
	Server cooling (kg)	0	2088	0	R410A refrigerant gas
			<b>Total</b>	<b>1931</b>	
2021	Pool car (m)	6,321	0.24052	1260	Small car, petrol (1.0 focus)
		1,084	0.16889	183	Small car, HYBRID - Lease from June 21
	Server cooling (kg)	0	2088	0	R410A refrigerant gas
			<b>Total</b>	<b>1443</b>	
2022	Pool car (m)	6,732	0.16628	1119	Small car, HYBRID
	Refrigerant emissions (kg)	0	675	0	R32 refrigerant gas
			<b>Total</b>	<b>1119</b>	
2023	Pool car (m)	9,434	0.16634	1569	Small car, HYBRID
	Refrigerant emissions (kg)	0	675	0	R32 refrigerant gas
			<b>Total</b>	<b>1569</b>	
2024	Pool car (m)	3,524	0.19865	671	Small car, HYBRID
	Refrigerant emissions (kg)	0	675	0	R32 refrigerant gas
			<b>Total</b>	<b>671</b>	

2025	Pool car (m)	8,119	0.16834	1367	Small car, HYBRID
	Refrigerant emissions (kg)	0	675	0	R32 refrigerant gas
			<b>Total</b>	<b>1367</b>	

### Scope 2 emissions

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e
2019	Electricity	34,901 kWh	0.2556	8,921
2020	Electricity	11,762 kWh	0.23314	2,742
2021	Electricity	35,172 kWh	0.21233	7,468
2022	Electricity (Gross)	84,974 kWh	0.19338	16,432
	Electricity (Net)	70,020 kWh	0.19338	13,541
2023	Electricity (Gross)	74,120 kWh	0.20707	16,677
	Electricity (Net)	35,165 kWh	0.20707	8,610
2024	Electricity (Gross)	80,030 kWh	0.20705	18,004
	Electricity (Net)	16,557 kWh	0.20705	4,893
2025	Electricity (Gross)	81,160 kWh	0.17700	14365.3
	Electricity (Net)	0 kWh	0.17700	0

### Scope 3 emissions – electricity transmission and distribution

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e
2019	Electricity	34,901 kWh	0.0217	757
2020	Electricity	11,762 kWh	0.02005	236
2021	Electricity	35,172 kWh	0.01879	661
2022	Electricity	84,974 kWh	0.01769	1,503
2023	Electricity	74,120 kWh	0.01792	1,328
2024	Electricity	80,030 kWh	0.01792	1,434
2025	Electricity	81,160 kWh	0.01853	1,504

## Scope 3 emissions – business travel

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2019	Car (m)	55,094	0.27459	15,128	Assumed all milage in medium sized diesel car. Cost data equates to 45p / mile
	Taxi (passenger.km)	3290	0.15018	494	Regular taxi. Cost data assumed to equate to £1.49 / km (see prior years)
	Air (passenger.km)	20,406	0.25493	5,202	Assumed all short haul flights (domestic to / from UK) with RF. Cost data assumed to equate to £0.42 / km (see prior years)
	Train (passenger.km)	78,963	0.04115	3,249	Assumed 'national rail' from 2019 data. Cost data assumed to equate to £0.341 / km based on 100% peak travel, advanced tickets and Manc to London: 260 km (thetrainline.com) and cost of £88.60 (receipts)
	Tram (passenger.km)	1,786	0.03508	63	Light rail and tram from 2019 data. Cost data assumed to equate to £0.33 / km (see prior years)
	London underground (passenger.km)	581	0.03084	18	London underground from 2019 data. Cost data assumed to equate to £0.35 / km (see prior years)
	Bus (passenger.km)	92	0.10471	10	Average local bus conversion factor due to whole UK use of public transport. Cost data assumed to equate to £0.30 / km based on other modes of public transport. Insignificant travel method to Aew
	Unallocated pseudo train (passenger.km)	181	0.04115	7	Unallocated travel expenses total £61.56 for the period, less than 0.15% of all travel expenses. 100% associated to train –reduced mode from 2018
				<b>Total</b>	<b>24,171</b>

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2020	Car (m)	26,971	0.26775	7,221	Assumed all milage in medium sized diesel car. Cost data equates to 45p / mile
	Taxi (passenger.km)	636	0.14549	93	Regular taxi. Cost data assumed to equate to £1.49 / km (see prior years)
	Air (passenger.km)	2,396	0.2443	585	Assumed all short haul flights (domestic to / from UK) with RF. Cost data assumed to equate to £0.42 / km (see prior years)
	Train (passenger.km)	18,981	0.03694	701	Assumed 'national rail' from 2019 data. Cost data assumed to equate to £0.353 / km based on 100% peak travel, advanced tickets and Manc to London: 260 km (thetrainline.com) and cost of £91.75 (receipts)
	Tram (passenger.km)	445	0.02991	13	Cost data assumed to equate to £0.33 / km (see prior years)
	London underground (passenger.km)	87	0.0275	2	Cost data assumed to equate to £0.35 / km (see prior years)
	Bus (passenger.km)	44	0.10312	5	Average local bus conversion factor due to whole UK use of public transport. Cost data assumed to equate to £0.30 / km based on other modes of public transport. Insignificant travel method to Aew
	Unallocated pseudo car miles	n/a	n/a	0	No unallocated travel expenses over the year
				<b>Total</b>	<b>8,621</b>

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2021	Car (m)	37,227	0.26549	9,883	Assumed all milage in medium sized diesel car. Cost data equates to 45p / mile
	Taxi (passenger.km)	495	0.14876	74	Regular taxi. Cost data assumed to equate to £1.49 / km (see prior years)
	Air (passenger.km)	0	0.24587	0	Assumed all short haul flights (domestic to / from UK) with RF. Cost data assumed to equate to £0.42 / km (see prior years)
	Train (passenger.km)	17,485	0.03549	621	Assumed 'national rail' from 2021 data. Cost data assumed to equate to £0.353 / km based on 100% peak travel, advanced tickets and Manc to London: 260 km (thetrainline.com) and cost of £91.75 (receipts)
	Tram (passenger.km)	524	0.02813	15	Cost data assumed to equate to £0.33 / km (see prior years)
	London underground (passenger.km)	93	0.02781	3	Cost data assumed to equate to £0.35 / km (see prior years)
	Bus (passenger.km)	103	0.10227	11	Average local bus conversion factor due to whole UK use of public transport. Cost data assumed to equate to £0.30 / km based on other modes of public transport. Insignificant travel method to Aew
	Unallocated pseudo car miles	n/a	n/a	0	No unallocated travel expenses over the year
				<b>Total</b>	<b>10,605</b>

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2022	Car (m)	31,879	0.27039	8,620	Assumed all milage in medium sized diesel car. Cost data equates to 45p / mile. (Pre June 2022)
	Car (m)	12,174	0.27492	3,347	Average diesel car (Post June 2022)
	Car (m)	12,756	0.27436	3,500	Average petrol car (Post June 2022)
	Car (m)	2,497	0.19318	482	Average hybrid car (Post June 2022)
	Car (m)	1,400	0.08272	116	Average electric car (Post June 2022)
	Taxi (passenger.km)	1737	0.14876	258	Regular taxi. Cost data assumed to equate to £1.49 / km (see prior years) (Pre June 2022) Reported distance (Post June 2022)
	Air (passenger.km)	11,019	0.19309	2,128	Assumed all short haul EU flights. Cost data assumed to equate to £0.42 / km (see prior years) (Pre June 2022) Reported distance (Post June 2022)
	Air (passenger.km)	583	0.24587	143	Domestic flight (UK) reported distance (Post June 2022)
	Train (passenger.km)	34,311	0.03549	1,218	Assumed 'national rail' from 2021 data. Cost data assumed to equate to £0.353 / km based on 100% peak travel, advanced tickets and Manc to London: 260 km (thetrainline.com) and cost of £91.75 (receipts) (Pre June 2022) Reported distance (Post June 2022)
	Tram / Underground (passenger.km)	917	0.02861	26	Cost data assumed to equate to £0.33 / km (see prior years) (Pre June 2022) Reported distance (Post June 2022)
	Bus (passenger.km)	188	0.0965	18	Average local bus conversion factor due to whole UK use of public transport. Cost data assumed to equate to £0.30 / km based on other modes of public transport. Insignificant travel method to Aew (Pre June 2022) Reported distance (Post June 2022)
	Unallocated pseudo car miles	n/a	n/a	0	No unallocated travel expenses over the year
				<b>Total</b>	<b>19,856</b>

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2023	Car (m)	19,667	0.27332	5,375	Average diesel car
	Car (m)	25,018	0.26388	6,602	Average petrol car
	Car (m)	1,718	0.19147	329	Average hybrid car
	Car (m)	45	0.15113	7	Average plug in hybrid car
	Car (m)	1,198	0.08819	116	Average electric car
	Taxi (m)	1,121	0.23927	268	Reported distance
	Air (m)	5,712	0.29933	1,710	Reported distance short haul
	Air (m)	7,702	0.26128	3,220	Reported distance long haul
	Air (m)	5,814	0.43885	2,552	Domestic flight (UK) reported distance
	Train (m)	45,710	0.05710	1,218	Reported distance
	Tram / Underground (m)	863	0.04605	40	Reported distance
	Bus (m)	11	0.16446	2	Reported distance
	Unallocated pseudo car miles	n/a	n/a	0	No unallocated travel expenses over the year
			<b>Total</b>	<b>22,827</b>	

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2024	Car (m)	12,945	0.27334	3,538	Average diesel car
	Car (m)	32,940	0.26473	8,720	Average petrol car
	Car (m)	3,164	0.20288	384	Average hybrid car
	Car (m)	27	0.17465	0	Average plug in hybrid car
	Car (m)	5,400	0.07636	412	Average electric car
	Taxi (m)	1,796	0.23926	430	Reported distance
	Air (m)	9,826	0.29933	2,941	Reported distance short haul
	Air (m)	0	0.42066	0	Reported distance long haul
	Air (m)	7,535	0.43884	3,307	Domestic flight (UK) reported distance
	Train (m)	55,561	0.42066	3,172	Reported distance
	Tram / Underground (m)	1,129	0.04605	5	Reported distance
	Bus (m)	99	0.17462	2	Reported distance
	Unallocated pseudo car miles	n/a	n/a	0	No unallocated travel expenses over the year
			<b>Total</b>	<b>23,124</b>	

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2025	Car (m)	13862	0.2785	3,860	Average diesel car
	Car (m)	21867	0.2619	5,726	Average petrol car
	Car (m)	8474	0.2064	1,486	Average hybrid car
	Car (m)	478	0.1683	80	Average plug in hybrid car
	Car (m)	9233	0.000	601	Average electric car
	Taxi (m)	2114	0.2393	506	Reported distance
	Air (m)	15148	0.2059	3,118	Reported distance short haul
	Air (m)	20988	0.2460	5,164	Reported distance long haul
	Air (m)	2767	0.3691	1,021	Domestic flight (UK) reported distance
	Train (m)	39474	0.0571	2,254	Reported distance
	Motorbike (m)	158	0.1829	29	
	Tram / Underground (m)	930	0.0460	43	Reported distance
	Bus (m)	249	0.1672	42	Reported distance
			<b>Total</b>	<b>23,931</b>	

### Scope 3 emissions – commuting

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2019	Car (m)	99,249	0.27459	27,253	Annual quantum calculated by: 100% in office x 228 workdays x 65 no. staff x daily commute distance by mode (2021 survey data)
	Train (passenger.km)	273,047	0.04115	11,236	
	Tram (passenger.km)	60,358	0.03508	2,117	
	Bus (passenger.km)	57,484	0.10471	6,019	
			<b>Total</b>		

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2020	Car (m)	31,620	0.26775	8,466	Annual quantum calculated by: 30% in office x 228 workdays x 70 no. staff x daily commute distance by mode (2021 survey data)
	Train (passenger.km)	86,990	0.03694	3,213	
	Tram (passenger.km)	19,229	0.02991	575	
	Bus (passenger.km)	18,314	0.10312	1,889	
			<b>Total</b>		

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2021	Car (m)	34,203	0.26549	9,080	Annual quantum calculated by: 28% in office x 228 workdays x 85 no. staff x daily commute distance by mode (2021 survey data)
	Train (passenger.km)	94,096	0.03549	3,339	
	Tram (passenger.km)	20,800	0.02813	585	
	Bus (passenger.km)	19,810	0.10227	2,026	
			<b>Total</b>		

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2022	Car (m)	88,968	0.27665	24,613	Annual quantum calculated by: Surveyed transport modes, distance and no. days office/week of 74 survey respondents converted to CO <sub>2</sub> /person/year average x 83 no. staff
	Motorbike (m)	6,572	0.18274	1,201	
	Train (passenger.km)	76,743	0.03549	2,724	
	Tram (passenger.km)	34,288	0.02861	981	
	Bus (passenger.km)	8,142	0.10778	878	
			<b>Total</b>		

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2023	Car - Petrol or Diesel (m)	91,620	0.2845	26,066	Carbon emission factors averaged based on survey split of vehicle fuel types.
	Car – low emissions (m)	11,104	0.0657	730	
	Motorbike (m)	3,466	0.18294	634	Annual quantum calculated by: Surveyed transport modes, distance and no. days office/week of 93 survey respondents
	Train (m)	115,277	0.03546	4088	

	Tram (m)	50,488	0.02860	1444	
	Bus (m)	15,586	0.10215	1592	
			<b>Total</b>	<b>33802</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2024	Car	79,007	0.2691	21,261	Carbon emission factors averaged based on survey split of vehicle fuel types.  Annual quantum calculated by: Surveyed transport modes, distance and no. days office/week of 84 survey respondents scaled up to 95 staff
	Car – low emissions (m)	14,646	0.0919	1,346	
	Motorbike (m)	12,996	0.1829	2,377	
	Train (m)	181,480	0.0571	10,362	
	Tram (m)	39,891	0.046	1835	
	Bus (m)	10,264	0.1746	1855	
				<b>Total</b>	

Period	source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2025	Car (m)	31,776	0.2785	8,849	Average diesel car
	Car (m)	50,172	0.2619	13,139	Average petrol car
	Car (m)	14,961	0.2064	3,088	Average hybrid car
	Car (m)	633	0.1683	107	Average plug in hybrid car
	Car (m)	34,225	0.0651	2,229	Average electric car
	Motorbike (m)	4,746	0.1829	868	
	Train (m)	162,258	0.0571	9,264	Reported distance
	Tram / Underground (m)	38,691	0.0460	1,782	Reported distance
	Bus (m)	12,430	0.1672	2,078	Reported distance
				<b>Total</b>	<b>41,403</b>

### Scope 3 emissions – home office (working from home)

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2019	Workstation Power (kWh)	0	0.2773	0	Annual quantum calculated by: 0% WFH x 1710 work hours x 65 no. staff x 0.140 kW per workstation
	Lighting Power (kWh)	0	0.2773	0	Annual quantum calculated by: 0% WFH x 1710 work hours x 65 no. staff x 0.010 kW per workstation
	Space Heating (kWh)	0	0.1839	0	Annual quantum calculated by: 0% WFH x 1710 work hours x 0.5 (heating season) x 65 no. staff x 5 kWh x 0.58 (additional usage metric based on 2021 surveyed data of staff who would result in additional heating by wfh)
			<b>Total</b>	<b>0</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2020	Workstation Power (kWh)	11,800	0.2532	2,988	Annual quantum calculated by: 70% WFH x 1710 work hours x 70 no. staff x 0.140 kW per workstation
	Lighting Power (kWh)	843	0.2532	213	Annual quantum calculated by: 70% WFH x 1710 work hours x 70 no. staff x 0.010 kW per workstation
	Space Heating (kWh)	122,219	0.1839	22,472	Annual quantum calculated by: 70% WFH x 1710 work hours x 0.5 (heating season) x 70 no. staff x 5 kWh x 0.58 (additional usage metric based on 2021 surveyed data of staff who would result in additional heating by wfh)
			<b>Total</b>	<b>25,674</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2021	Workstation Power (kWh)	13,789	0.2311	3,187	Annual quantum calculated by: 70% WFH x 1710 work hours x 70 no. staff x 0.140 kW per workstation
	Lighting Power (kWh)	985	0.2311	228	Annual quantum calculated by: 70% WFH x 1710 work hours x 70 no. staff x 0.010 kW per workstation
	Space Heating (kWh)	142,819	0.1832	26,159	Annual quantum calculated by: 70% WFH x 1710 work hours x 0.5 (heating season) x 70 no. staff x 5 kWh x 0.58 (additional usage metric based on 2021 surveyed data of staff who would result in additional heating by wfh)
			<b>Total</b>	<b>29,573</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2022	Homeworking Power (kWh)	61,375	0.03168	1,944	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 83 no. staff
	Space Heating (kWh)	32,030	0.30907	9,900	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 83 no. staff
			<b>Total</b>	<b>11,844</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2023	Homeworking Power (kWh)	65,664	0.0314	2,064	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 94 no. staff
	Space Heating (kWh)	33,516	0.3023	10,133	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 94 no. staff
			<b>Total</b>	<b>12,198</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2024	Homeworking Power (kWh)	50,616	0.0314	1,797	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 95 no. staff
	Space Heating (kWh)	30,846	0.3023	9,325	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 95 no. staff
			<b>Total</b>	<b>11,122</b>	

Period	Source	Annual quantum	Conversion factor	kgCO <sub>2</sub> e	Notes
2025	Homeworking Power (kWh)	52,497	0.0314	1,648	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 95 no. staff
	Space Heating (kWh)	29,412	0.3023	8,891	Annual FTE hours quantum calculated by: Surveyed % WFH x 1710 work hours x 95 no. staff
			<b>Total</b>	<b>10,543</b>	



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