CAMBRIDGE
UNIVERSITY PRESS & ASSESSMENT

Carbon Emissions Report 2022-2023

The journey towards carbon zero

We take our responsibilities to people and planet seriously and recognise our moral obligation to act to tackle the climate crisis. We seek to take a leading role in promoting environmental, ethical, and legal best practice within our industry. We are focused on:

- Educating on and advocating for a better future
- Adding social and environmental value to the world through our actions
- Minimising impact on the environment and the communities where we operate

Science-based targets

We manage our emissions via the world's most widely-used greenhouse gas accounting standards, the Greenhouse Gas Reporting Protocol – Corporate Standard. This has three areas or scopes.

Scope 1	Scope 2	Scope 3
Direct emissions from combustion of fuels in owned buildings and vehicles	Indirect emissions via the purchase of electricity and heating	Other indirect emissions across the entire value chain such as purchased products, travel, transport and waste
We continue our commitment to reaching absolute carbon zero on all energy-related emissions by 2048, in line with our University's campus-wide goal. We also set an interim target of a 72 percent reduction in energy related emissions by 2030.		Science-based targets for Scope 3 are in development and will be reviewed by our governance boards in 2023. We have set targets to reduce corporate travel emissions by 25 percent by 2030 through budgetary incentives and maintaining a hybrid working approach.

Methodology

We collect data and reports on our energy and carbon emissions, informed by the Greenhouse Gas Protocol Corporate Accounting and Reporting and Global Reporting Initiative standards. We gather data on all direct and indirect activities which occur due to our activity in the UK, and are working to collect this data from other countries where we have a physical presence. All emissions calculations are derived from activity data wherever possible for example, energy and fuel billing data and fleet mileage from leased vehicles. We use the most recent available UK Government emission factors to calculate carbon emissions. We report emissions in metric tonnes of carbon dioxide equivalent which includes the six gases regulated by the Kyoto Protocol. This report currently includes, only emissions associated with activity in the UK. We are working to collect data on our international operations, as well as on our Scope 3 emissions, to include in future reports.

Reduction actions

A range of 21 carbon reduction projects and actions were completed in 2022-2023 across the UK estate of Cambridge University Press & Assessment. It is estimated that these will save around 200 tonnes of carbon, or six percent of our Scope 1 and 2 carbon emissions. This included:

- Boiler and gas replacements led to an estimated 10 tonnes of carbon savings. This included the replacement of two gas boilers with electric alternatives, and the refurbishment of a kitchen which removed gas appliances in favour of electric options.
- Improvements to controls and energy management led to an estimated 179 tonnes of carbon emissions savings. This included adjustments to scheduling of lighting, air conditioning and other plant running times, particularly outside of office hours, as well as adjustments to temperature set points in offices and warehouses.
- Replacements and upgrades of lighting led to an estimated 9 tonnes of carbon savings. This included the replacement of tennis court floodlights, gym and fitness studio lighting in The Cass Centre, upgrades to basement lighting in our Bookshop, and ongoing replacements of lighting and sensors across the Triangle, Printing House and distribution centres.
- Improved monitoring and metering of energy use has been a focus, and helped identify and rectify faults and issues which avoided an estimated two tonnes of carbon emissions. New gas half-hourly metering has been installed on five sites which will further improve visibility of energy use.
- Improvements and replacements of ventilation systems and pumps led to an estimated one tonne of carbon emissions savings. This included the replacement of aging ventilation pumps, as well as fitting timers and controls to existing systems.

Although not captured in our carbon emissions reporting, it is also important to note that a re-tender of electricity tariffs presented the opportunity to ensure that we continued the use of green tariffs. This means that 99.4 percent of our UK electricity use or 69.2 percent of our total UK energy use, is sourced from certified renewable sources. This is roughly equivalent to around 1,700 tonnes of carbon saved, when compared to UK grid average carbon emissions from electricity.

Carbon data for financial year 2022-23

Table: Scope 1 and 2 emissions for all our activity within the UK for the period 1 August 2022 to 31 July 2023, compared to the period 1 August 2021 to 31 July 2022.

Scope 1 and 2 UK carbon emissions											
Country	Scope	Resource	Metric (qty)	2021-22		2022-23		Percent change from previous year		Intensity metrics 2022-23	
				Qty	tCO2e	Qty	tCO2e	Qty	tCO2e	kgCO2e emissions per UK FTE	kgCO2e emissions per UK 1,000m² floor space
UK	1	Gas	kWh	5,541,844	1,079	5,124,585	998	-7.5%	-7.6%	249.06	10.53
UK	1	Fleet fuel	litre	9,796	25	9,442	24	-3.6%	-5.4%	5.92	0.25
UK	1	Fleet passenger distance	km	23,150	3	21,974	3	-5.1%	2.4%	0.82	0.03
UK	1	Pool car	km	8,111	1	9,025	1	11.3%	10.8%	0.24	0.01
UK	2	Purchased electricity	kWh	11,238,720	2,173	11,022,262	2,282	-1.9%	5.0%	569.75	24.08
UK	2	Purchased heat	kWh	182,512	31	132,905	24	-27.2%	-23.4%	5.96	0.25
Total UK Scope 1 and 2 emissions				3,313.12		3,331.99		0.6%		831.75	35.15
Scope 1 and 2 UK carbon emissions reduction (on-site solar photovoltaic generation)											
Country	Scope	Resource	Metric (qty)	Qty	tCO2e	Qty	tCO2e	Qty	tCO2e	kgCO2e emissions per UK FTE	kgCO2e emissions per UK 1,000m² floor space
UK	1	Solar PV	kWh	701,354	136	744,956	154	6.2%	13.7%	38.51	1.63
Scope 1 and 2 UK energy use equivalent											
				2021-22		2022-23		Percent change from previous year		kWh per UK FTE	kWh per UK 1,000m2 floor space
Total UK energy, kWh equivalent				17,088,719.27		16,401,650.19		-4.0%		4,094,271.14	173,029.61