

2018/19 Annual carbon emissions report for the University of Cambridge

Reporting period:	1 August 2018 - 31 July 2019.
	This report should be read alongside our Environmental Sustainability Annual Report for 2018/19, which provides some context for these figures and a series of related Key Performance Indicators (KPIs) - https://www.environment.admin.cam.ac.uk/Annual-Report
Our reporting boundary has been defined under:	The Operational Control Approach. Please refer to our Methodology Statement for full details of how we have compiled the figures in this report - https://www.environment.admin.cam.ac.uk/Annual-Report
Emissions scopes included in our report:	We have measured our scope 1 and 2 emissions, with the exception of fugitive emissions, and some of our scope 3 emissions. We do not currently have robust data for all of our scope 3 emission sources.
Our carbon reduction target(s):	We have adopted a Science Based Target, which commits us to reduce our scope 1 and 2 emissions to absolute zero by 2048. As an interim target, we need to reduce our emissions by 75% against 2015/16 levels by 2030.
Baseline year for our target and reporting:	2015/16

Emission source	Reporting year				Commentary, including specific exclusions
	2018/19	2017/18	2016/17	2015/16 (Baseline year)	
Scope 1					
Gas	18,399	18,795*	18,130*	16,385*	
Oil	205	198*	243*	239*	
Biomass	5	1	6	7	The carbon conversion factors used for these calculations only account for the nitrous oxide and methane emissions from biomass combustion; the carbon dioxide emissions value is set to zero to account for the carbon dioxide absorbed by fast-growing bio-energy source during their growth
Fuel used in owned vehicles	300	238*	277*	326*	
Fugitive emissions					We do not currently measure fugitive emissions from our estate; we are exploring options for quantifying this emissions source in future
Scope 2					
Electricity - Location based emissions	37,300	41,049*	49,823*	56,214*	
Electricity - Market based emissions	37,300	41,049*	49,823*	56,214*	
Purchased heat and steam	1,663	1,733*	1,255*	1,658*	
Total scope 1 and 2 emissions					
Scope 1 and 2 - Location based emissions	57,872	62,014*	69,734*	74,828*	
Scope 1 and 2 - Market based emissions	57,872	62,014*	69,734*	74,828*	
Scope 3					
Purchased good and services	395,500				We began to estimate our supply chain emissions in 2018/19, using a free online tool provided by the Greenhouse Gas Protocol. This tool estimates emissions on a simple economic input-output basis, so these figures should be regarded as an order of magnitude estimate, rather than an accurate calculation of our supply chain emissions
Capital goods					Not quantified
Fuel and energy related activities not included in scope 1 or 2	456	437*	345*	357*	These are emissions associated with our use and disposal of water
Upstream transportation and distribution					Not quantified
Waste generated in operations	93	88*	112*	435	
Business travel	16,259	17,596	16,254	12,082*	
Employee commuting	13,653	11,392	11,870	8,029	Commuting figures include staff commuting only; we do not currently quantify emissions from student commuting. A 2015 survey found that 91% of students commute by walking or cycling
Upstream leased assets					Not quantified
Downstream transportation and distribution					Not quantified
Processing of sold products					Not quantified
Use of sold products					Not quantified
End of life treatment of sold products					Not quantified
Downstream leased assets					These are emissions from buildings that the University owns, and leases to a third party. Where the University has operational control over the building, these emissions have been included in our scope 1 and 2 figures. We may report emissions from University-owned buildings over which we do not have operational control, as part of our scope 3 emissions in future
Franchises					Not quantified
Investments					Not quantified
Out of scope emissions					
Direct carbon dioxide emissions from biomass consumption	104	32	151*	176	These do not form part of our emissions but we have reported them for transparency

Notes:

We have undertaken a comprehensive review of the processes and methodologies we use to compile our carbon emissions figures and, in light of this, have amended some of our historical figures. The figures in this report that are marked with an asterisk (*) have been updated since our previous carbon emissions report.

Reasons for change in emissions:

Our total scope 1 and 2 emissions are reducing, mainly due to decarbonisation of the UK electricity grid. Emissions from staff commuting are increasing, due to an increase in the percentage of employees who are travelling to work as single occupancy car drivers. Further commentary is provided in our Annual Environmental Sustainability Report for 2018/19 - <https://www.environment.admin.cam.ac.uk/Annual-Report>.