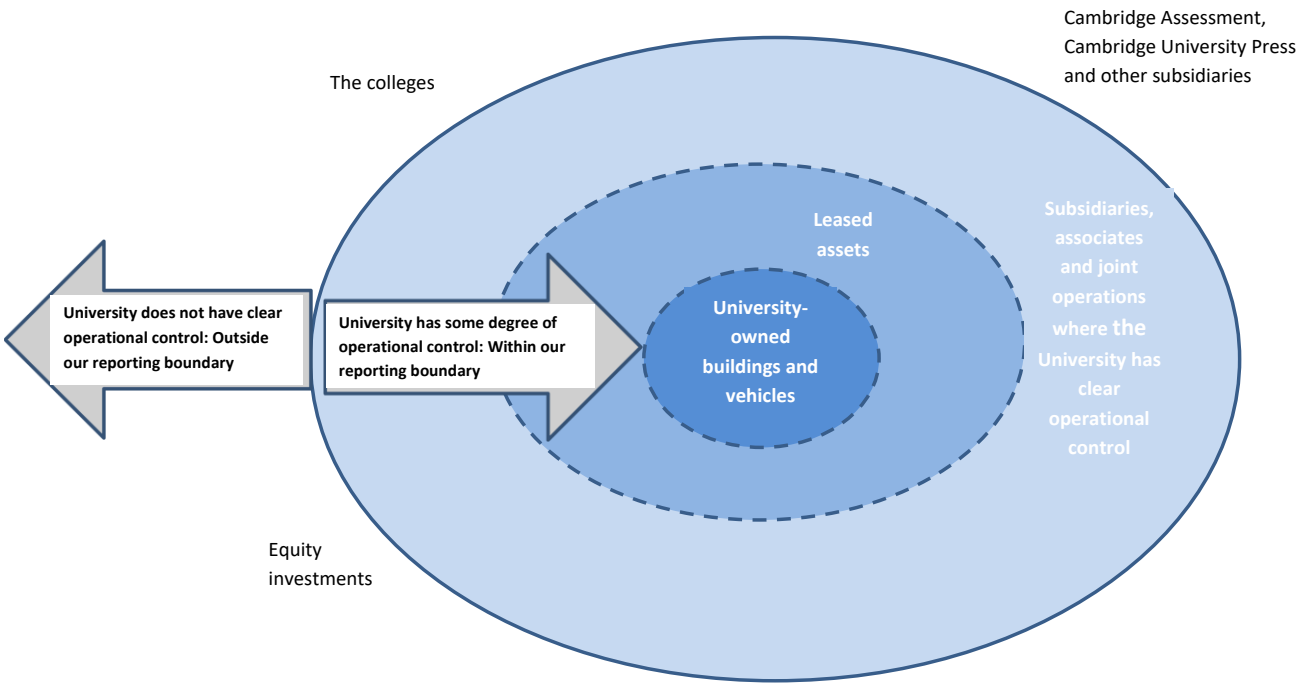
# University of Cambridge annual carbon emissions report for 2017/18

## March 2019

Under best practice guidance on carbon emissions reporting[1], there are a number of different approaches that an organisation can take to define which operations and activities need to be included in its carbon emissions reporting. The University has adopted what is known as the Operational Control approach, under which the emissions sources and operations included in our reporting are, to a greater or lesser extent, within the control of the operational functions of the University. Figure 1 below illustrates which operations are included in our emissions reporting under this approach, and which are excluded.

*Figure 1: Our 2017/18 carbon emissions reporting boundary*




A breakdown of our 2017/18 carbon emissions is provided below together, for comparison, with our figures for 2015/16, 2016/17 and 2005/06, the baseline year for our carbon reduction target.

In calculating these figures, we have applied Government-published carbon conversion factors[2].

[1] See ghgprotocol.org/corporate-standard

[2] See https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

| Emission source | 2017/18 | 2016/17 | 2015/16 | Base year (2005/06) | Notes |
|---|---|---|---|---|---|
| Scope 1 Emissions | | | | | |
| Gas | 21,877 | 20,453[3] | 18,659 | 15,015 | |
| Oil | 194 | 245 | 242 | 436 | |
| Biomass | 1 | 6 | 7 | 0 | 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 |
| Diesel | 225 | 263 | 308 | 229 | |
| Petrol | 13 | 13 | 17 | 15 | |
| Liquefied Petroleum Gas | 0 | 0.11 | 0.10 | 0.08 | |
| Fugitive emissions | Not quantified | Not quantified | Not quantified | Not quantified | We do not currently measure fugitive emissions from air conditioning units on our estate; we are exploring options for quantifying emissions from this source in future |
| Scope 2 Emissions | | | | | |
| Electricity | 41,306 | 50,048[3] | 56,482 | 54,136 | |
| Purchased heat and steam | 1,706 | 1,455 | 1,865 | 2,157 | |
| Gross emissions total | | | | | |
| Scope 1 and 2 total | 65,322 | 72,484[3] | 77,580 | 71,989 | Our Scope 1 and 2 figures include emissions from buildings that the University leases from a third party |

[3] The 2016/17 figures for emissions from gas and electricity, and total Scope 1 and 2 emissions, were incorrectly reported in our 2017 report and have been corrected in this report.

| Emission source | 2017/18 | 2016/17 | 2015/16 | Base year (2005/06) | Notes |
|---|---|---|---|---|---|
| Scope 3 Emissions | | | | | |
| Supply chain | Not quantified | Not quantified | Not quantified | Not available – we began measuring our Scope 3 emissions in 2012/13 | We do not currently quantify emissions from our supply chain, as there is not an accurate way of doing this. We are working to improve the data we hold on the impact of our supply chain, and to identify priority areas for improvement |
| Water | 457 | 369 | 381 | | |
| Waste | 164 | 135 | 435 | | |
| Business travel | 17,596 | 16,254 | 11,138 | | |
| Commuting | 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 |
| University-owned buildings occupied by a third party | See notes | See notes | See notes | See notes | Where the University has full operational control over the building, these emissions have been included in our Scope 1 and 2 figures. In future, we may report emissions from University-owned buildings over which we have no operational control as part of our Scope 3 emissions |
| Net Emissions (Scope 1 and 2 only) | | | | | |
| Exported renewables | 0 | 0 | 0 | 0 | We do currently export any renewable energy to the grid and therefore cannot offset the renewable energy that we generate against our gross Scope 1 and 2 emissions |
| Net emissions total (Scope 1 and 2) | 65,322 | 72,484[3] | 77,580 | 71,989 | |
| Out of scope emissions | | | | | |
| Direct carbon dioxide emissions from biomass consumption | 32 | 169 | 176 | 0 | These do not form part of our emissions but we have reported them for transparency |