University of Cambridge annual carbon emissions report for 2016/17

Under best practice guidance on carbon emissions reporting, 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.

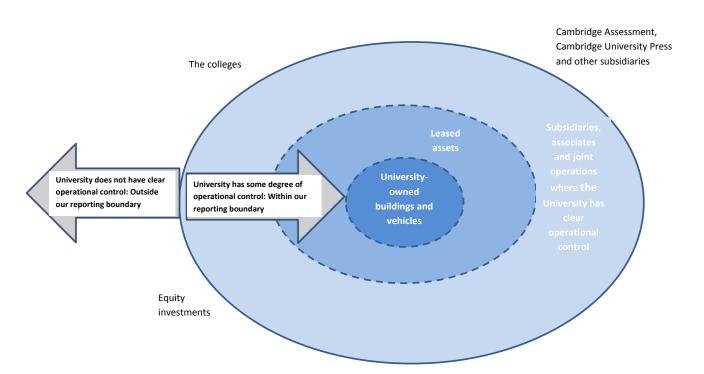


Figure 1: Our 2016/17 carbon emissions reporting boundary

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

In calculating these figures, we have applied Government-published carbon conversion factors¹.

¹ See https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

Emission	Notes					
source	2016/17	2015/16	Base year (2005/06)			
Scope 1 Emissio	ns					
Gas	18,248	18,659	15,015			
Oil	245	242	436			
Biomass	6	7 ²	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	263	308	229	5 5		
Petrol	13	17	15			
Liquefied Petroleum Gas	0.11	0.10	0.08			
Fugitive emissions	Not quantified	Not quantified	Not quantified	We do not currently measure fugitive emissions from air conditioning units on our estate; we will explore options for quantifying emissions from this source in future		
Scope 2 Emissio	ns					
Electricity	54,258	56,482	54,136			
Purchased heat and steam	1,455	1,865	2,157			
Gross emissions	total					
Scope 1 and 2 total	74,489	77,580	71,989	Our Scope 1 and 2 figures include emissions from buildings that the University leases from a third party		

Scope 3 Emission	ns						
Supply chain Water	Not quantified 369	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			
Waste	135	435					
Business	16,254	11,138					
travel	10,20	11,130	•				
Commuting	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	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	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	74,489	77,580	71,989				
total (Scope 1 and 2)							
Out of scope em		2.1					
Direct carbon dioxide emissions from biomass consumption	169	176 ²	0	These do not form part of our emissions but we have reported them for transparency			

² This figure has changed from that shown in our 2016 carbon emissions report, due to a previous error in our biomass consumption figures for 2015/16.