







Annual Carbon Emissions Report 2014/15

This annual report details the University's progress against its Carbon Management Plan 2010 - 2020.

Summary

Target	Description	Annual Change	%	On target	Commentary
Overall Reduction of Scope 1 & 2 emissions	Based on the 2005-6 baseline in the Carbon Management Plan. 32% reduction by 2020.		<1%		Small reduction for 2014/15 from previous year, but overall no reduction from baseline. There was no annual target for 2014/15
Improved efficiency of buildings	Scope 1 and 2 emissions per m ² of total building floor area		4%		Continued improvement from previous year. Overall improvement of 17% from 2005-6. (exc. Trinity Square)
Overall Reduction of Scope of Scope 1, 2 and 3 emissions	Scope of emissions includes waste, water, business travel and electricity distribution				Baseline set in 2014/15 to compare against in future years
Improved efficiency per student	Recorded Scope 1, 2 and 3 emissions per student				Baseline set in 2014/15 to compare against in future years

Total Carbon Emissions for 2014/15

The scope of emissions includes all electricity and gas use, fleet fuel consumption, refrigerant gases for air conditioning units, heat purchased, water, waste, business travel and electricity distribution. It excludes emissions from procurement and commuting.

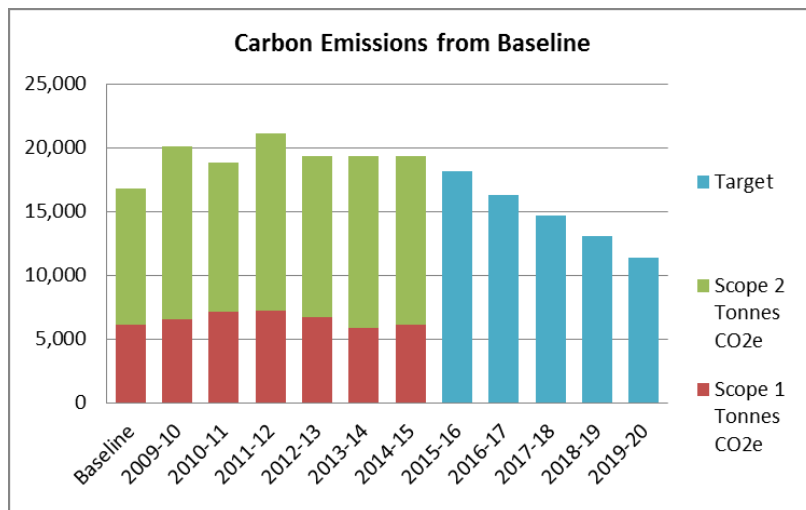
		Emission	Units
Scope 1	Gaseous fuels	6,059	tCO _{2e}
	Vehicle fleet	65	tCO _{2e}
	Refrigerant Gases	107	tCO _{2e}
	Total	6,231	tCO _{2e}
Scope 2	Purchased electricity (Grid)*	13,189	tCO _{2e}
	Purchased electricity (Other)	0	tCO _{2e}
	Heat purchased	0	tCO _{2e}
	Total	13,189	tCO _{2e}
Scope 3	Business Travel	5014	tCO _{2e}
	Water	213	
	Waste	26	
	Other	1,087	tCO _{2e}
	Total	6,340	tCO _{2e}
Total emissions		25,760	tCO _{2e}

* All electricity purchased for our larger sites is from Green Tariff. This covers 90% of electricity use.

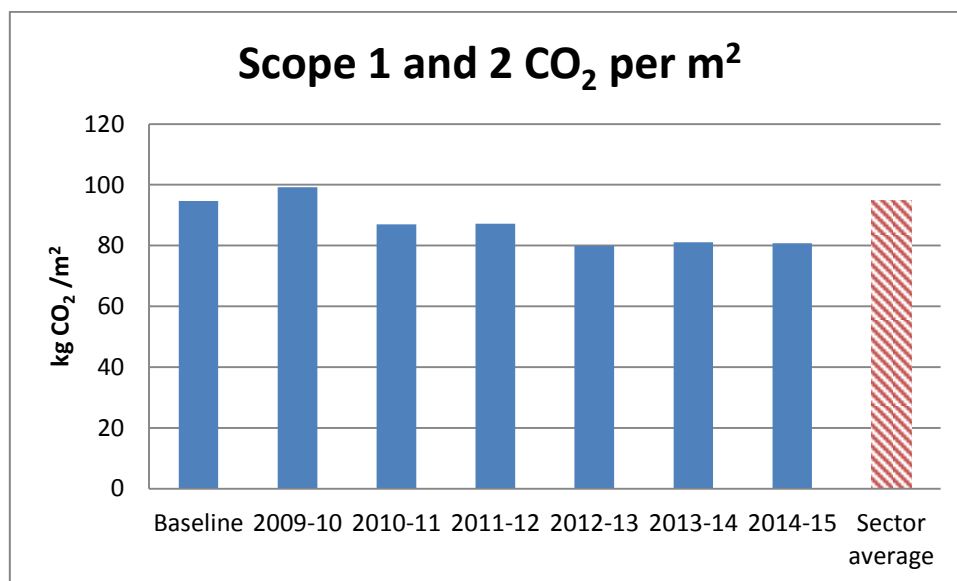
Scope 1 and 2 emissions

Total Scope 1 and 2 emissions have reduced slightly compared to the previous year, with a reduction of 80 tonnes to 19,313 tonnes, which is less than 1%. However, emissions remain 2,523 tonnes higher than the 2005-6 baseline. Without the additional electricity for Trinity Square student accommodation emissions would have reduced by 707 tonnes compared to the previous year.

The target emissions shown in blue represent the savings we expect to achieve through the Carbon Management Plan 2010 to 2020 and 2015 update, which detail projects for the forthcoming years.



To show the relative efficiency of our building stock, scope 1 and 2 emissions have been normalised against the total floor area of university buildings. Although this is not exact, as some buildings only have partial use, or are mothballed, it gives a guide as to the improving efficiency of the building portfolio. For 2014/15 it excludes Trinity Square student accommodation as we have been unable to obtain data on its heat consumption.

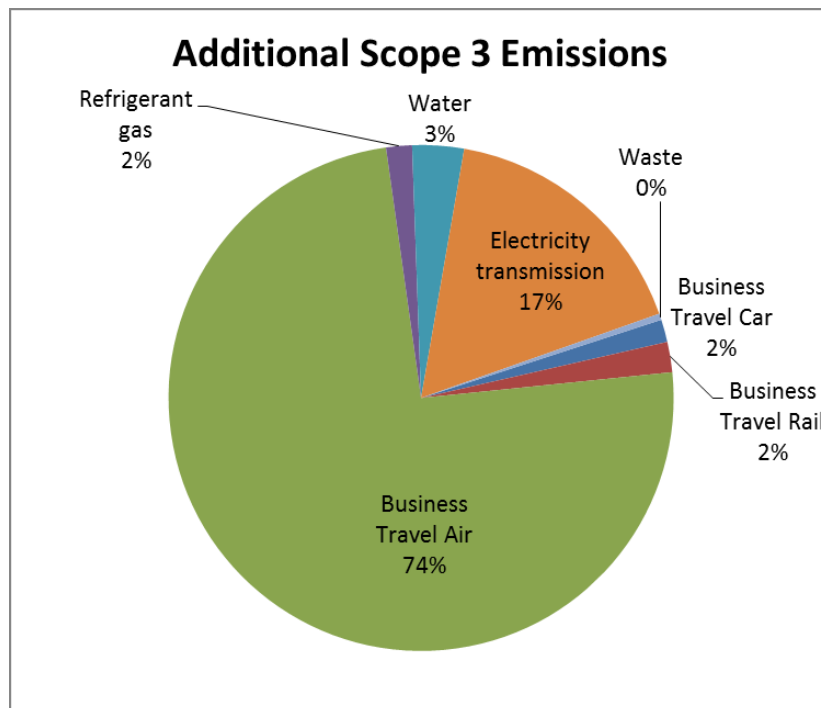


The graph shows that the emissions per square metre fell by 4% in 2014/15 compared to the previous year, suggesting that the efficiency of our building stock has improved by 17% compared to

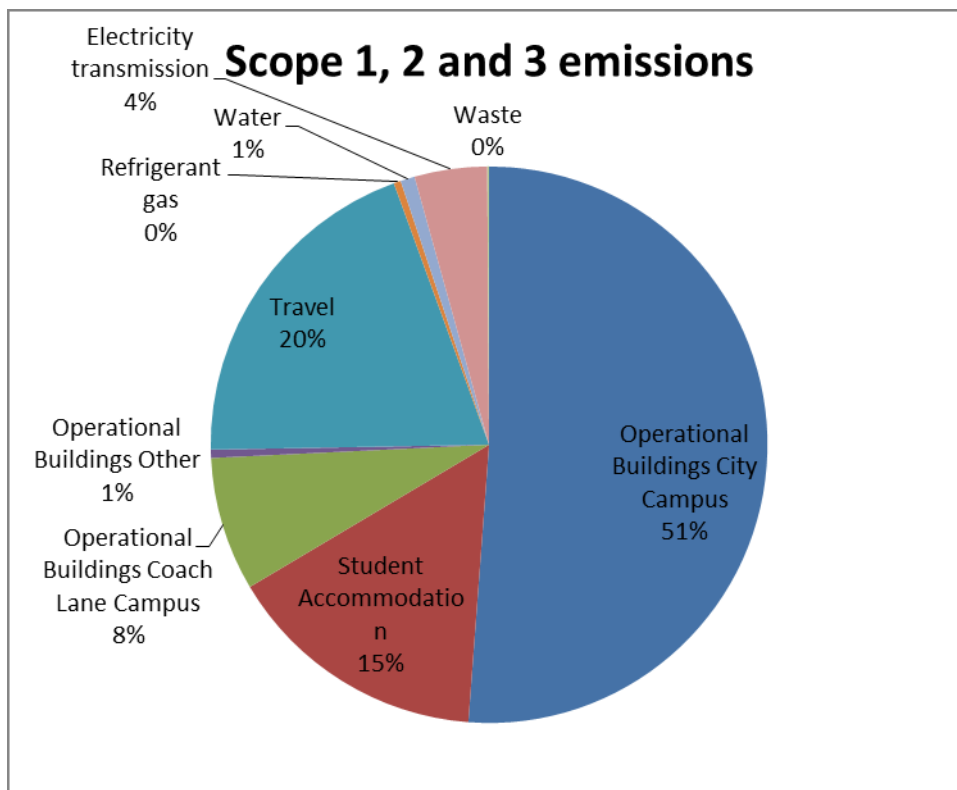
the baseline year, falling to 80kg CO₂/m². This compares favourably to the sector average of 95kg CO₂/m² (AUDE 2014 annual report).

Scope 3 emissions

For the first time we have collated data for Scope 3 emissions, and refrigerant gases. The total emissions from these additional sources was 6,447 tonnes CO₂e. The largest proportion of these emissions, 74%, was plane journeys. In total 22 million kms were travelled by plane, the equivalent of flying around the equator 550 times. The CO₂ emissions produced were the equivalent to those from 1,200 houses.



Total Emissions



The total footprint of recorded emissions for 2014/15 was 25,760 tonnes of CO₂e. This new baseline including scope 3 emissions will be used for comparisons and targeting in future years.

To provide a benchmark which will allow for comparisons against growth, we will also normalise total emissions against the total number of students.

