EAUC Annual Conference 2013
Carbon Footprint Report

Calculated by:

Account$_2$

EAUC Annual Conference – Carbon Footprint Report

University of Nottingham - April 2013

Contents

Introduction

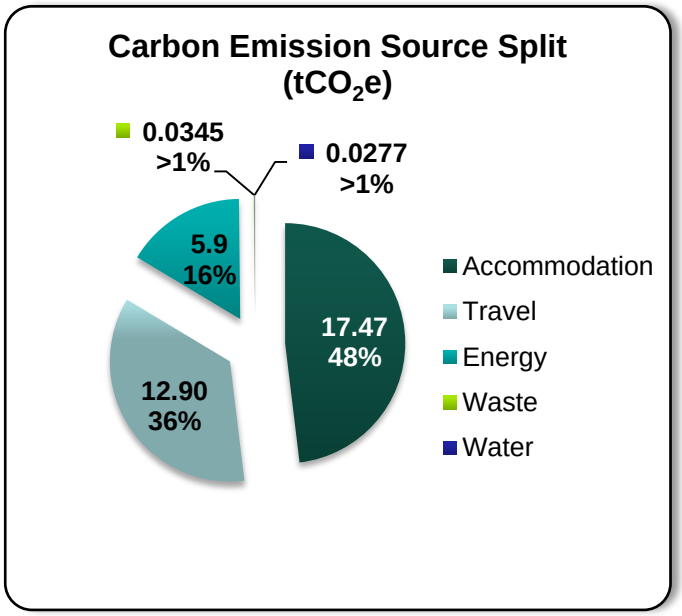
This report provides the carbon footprint calculation of the EAUC Annual Conference 2013, held at the University of Nottingham between Wednesday 17th April and Friday 19th April. Data was collected for five emission sources: energy, water, waste, travel, and accommodation.

The energy and water data was provided by the East Midlands Conference Centre. EAUC partner SITA UK, provided the recycling facilities for conference and the waste data. The travel and accommodation data was collected directly from the delegates and exhibitors who attended the conference. Delegates completed an online questionnaire prior to the conference and Greenstone used these responses to calculate the emissions associated with travel to and from the conference.

This report will provide an overview of the total emissions, followed by a more in depth look at the emissions from energy, water, waste, accommodation, and travel.

Overall Emissions

The total carbon emissions associated with the conference were **36.3 tonnes CO_2e**; the breakdown of the total emissions are provided in the chart below.

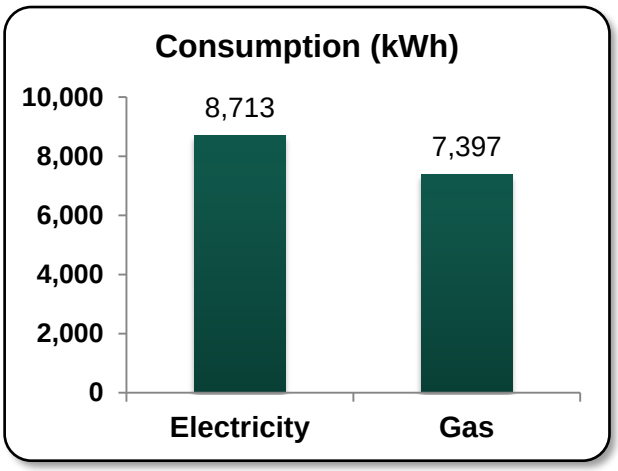


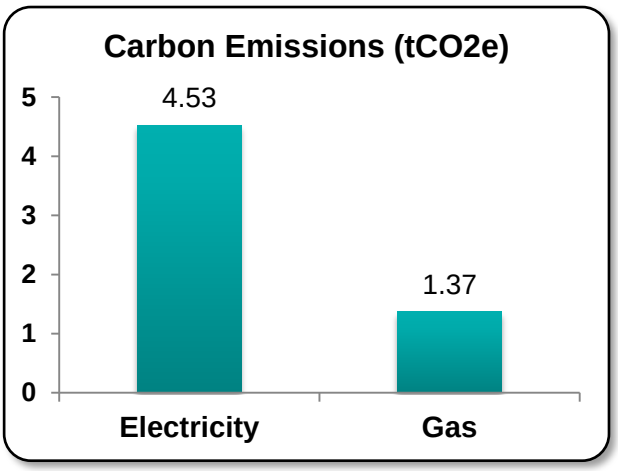
Emission Source	Consumption	Emissions (tCO_2e)
Electricity	8,713 kWh	4.53
Gas	7,397 kWh	1.37
Water	26.3 m^3	0.0277
Waste	32.5 kg	0.0345
Accommodation	563 nights	17.47
Air	44,166 km	4.56
Road	15,511 km	2.95
Rail	92,451 km	5.38

Energy

Energy data was estimated using the average daily consumption of electricity and gas for April in 2009-2012 (inclusive); this was extrapolated for the length of the conference, 2.5 days.

The electricity emissions were more than three times those of the gas emissions, despite the consumption being only 17% greater. This is due to the relative differences in the carbon emissions per kWh of electricity vs gas.





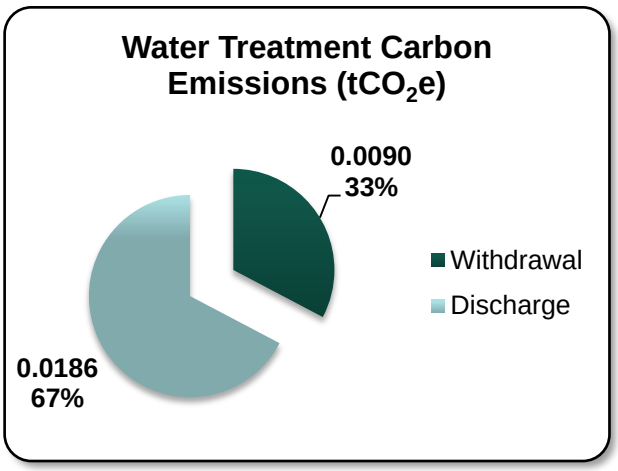
Water

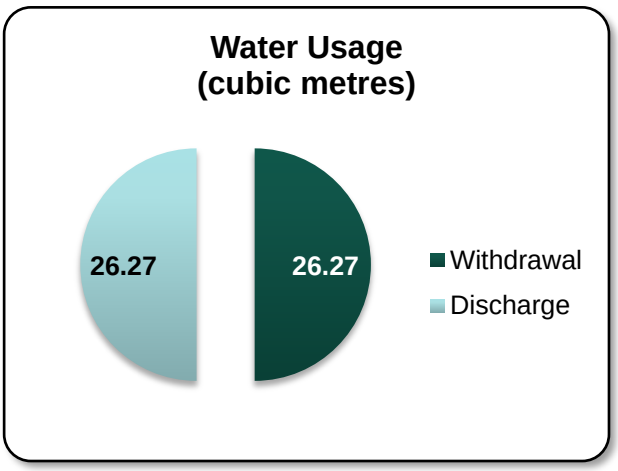
Water usage for the conference was also estimated using the April daily average for 2009 to 2012.

Carbon emissions relating to water usage are generated through three aspects:

- *Withdrawal* – getting the water to the tap.
- *Recycled* – water that is recycled or reused (no associated emissions).
- *Discharge* – what happens to the water once it has been used.

Although a total of 26.27 cubic metres was consumed, this quantity is both withdrawn and discharged. One-third of the emissions resultant from this is related to the extraction and transportation of water to the tap. Two-thirds of the emissions are related to treating it once it has been used.



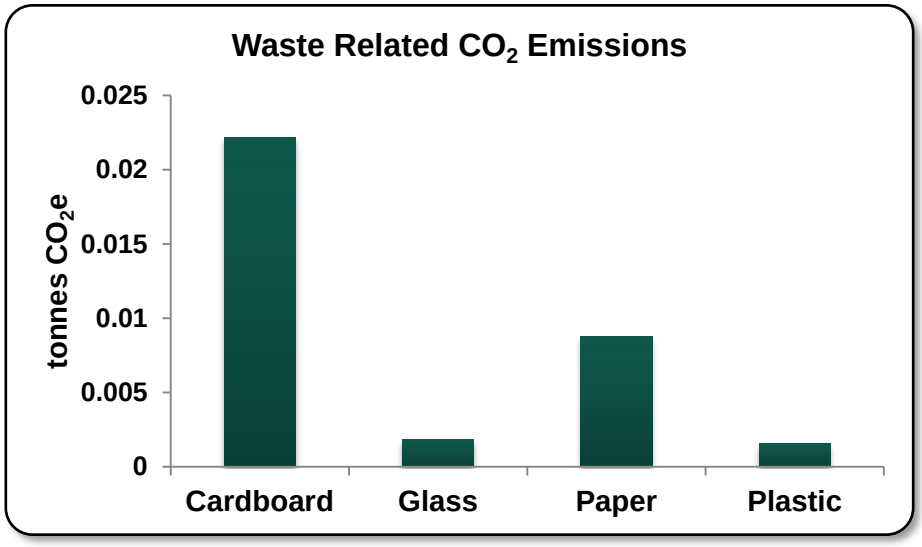


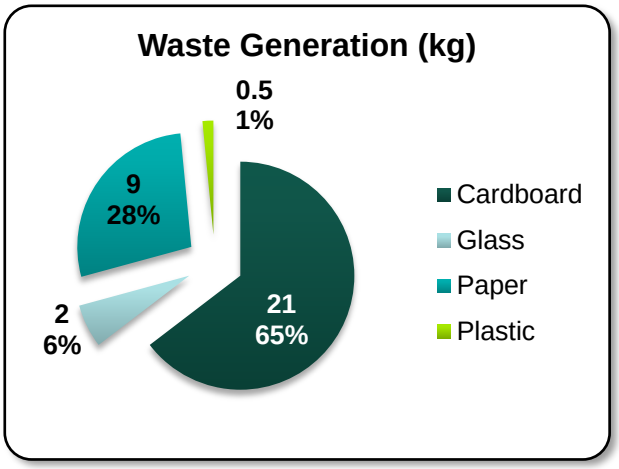
Waste

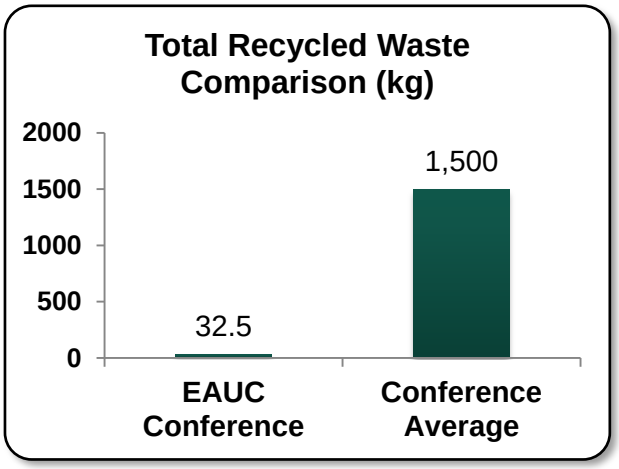
Data on recycled waste was provided by conference sponsor, SITA UK. Non-recycled waste data was unfortunately not available from the on-site contractor for inclusion in the footprint calculation.

The carbon emissions from recycled waste from the EAUC conference was 34 kg CO_2e.

The total recycled waste generated by the conference was 32.5kg. This is considerably less than the average amount of recyclable waste for a similar size conference, which is 1,500kg according to SITA UK. This was primarily due to the conscious efforts of the exhibitors and visitors, as well as the on-site catering company. Coffees & teas, lunch and other refreshments were served in crockery, what in turn minimised use of plastic, aluminium cans and paper cups and plates. There was also a significant lack of take-away marketing material in comparison to other conferences which was an effort by a number of the exhibitors, who indicated in their travel surveys that they were consciously limiting the quantity of paper materials distributed.







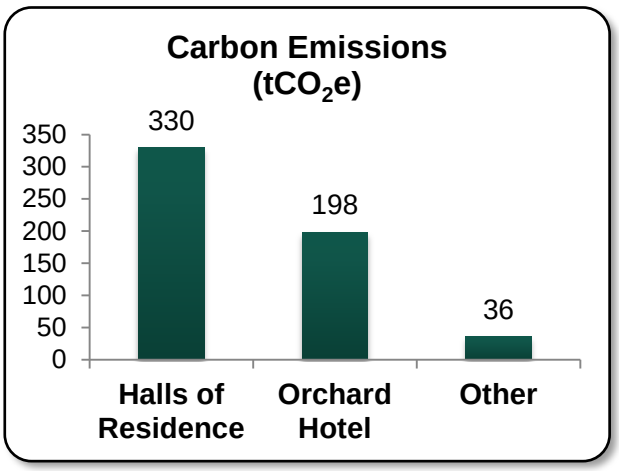
Data Provided by:

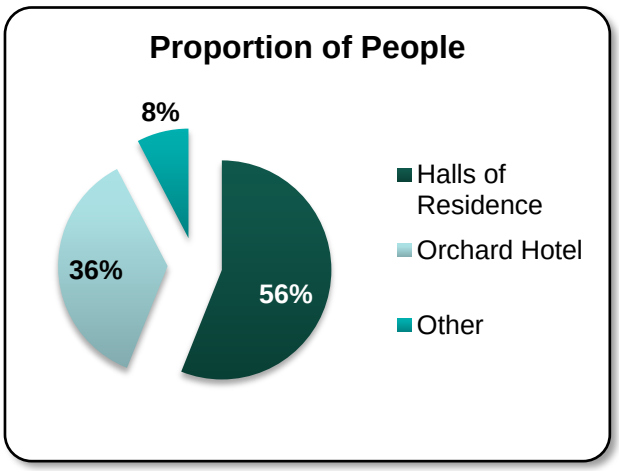
Accommodation

Information on the accommodation used by delegates and exhibitors was collected in the online travel survey, and extrapolated for all attendees.

The majority of people indicated that they were staying in halls of residence at the University of Nottingham.

Of the people who stayed in accommodation, almost 175 people stayed for two nights, with 52 and 55 each staying 1 and 3 nights, respectively.



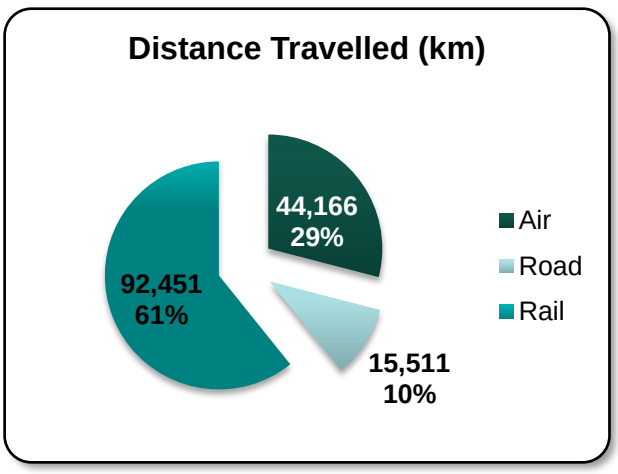


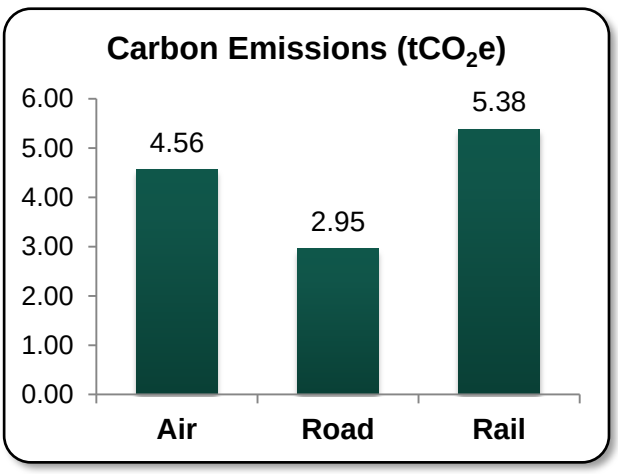
Travel

Travel makes up more than one-third of the total conference emissions. The data was collected from the pre-conference survey, completed online by the majority (56%) of people, which was subsequently extrapolated for all people on the delegates and exhibitors list.

Rail travel accounted for over half of the total distance people travelled to attend the conference, yet the difference in emissions were much closer.

The second largest contributor to emissions was air travel, even though less than 15 people used this method of transport.

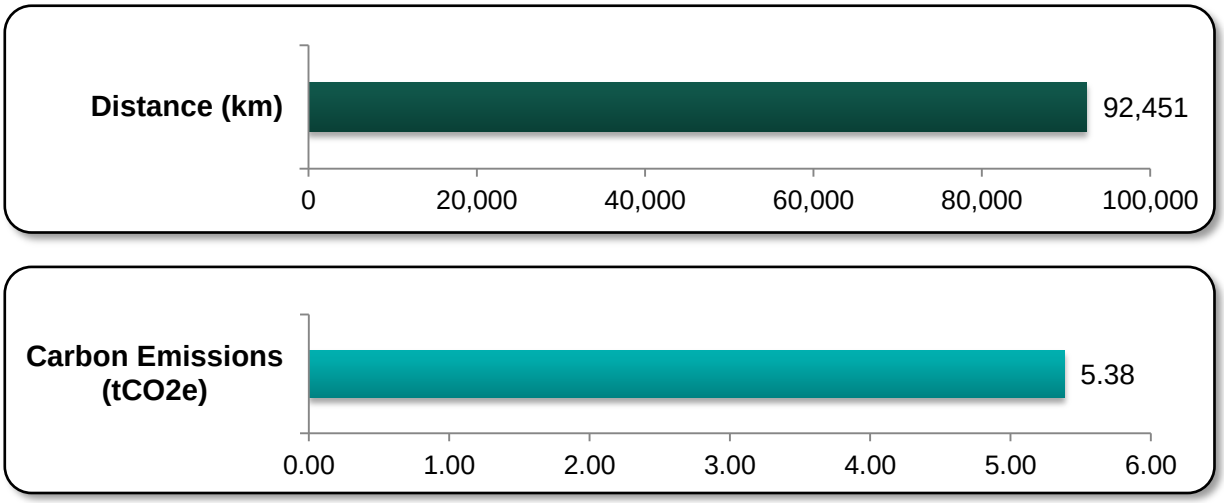




Rail Travel

This was the most popular form of transport used to attend the conference and despite having 246 people travelling 92,451 km, the associated carbon emissions were only 5.38 tonnesCO_2e.

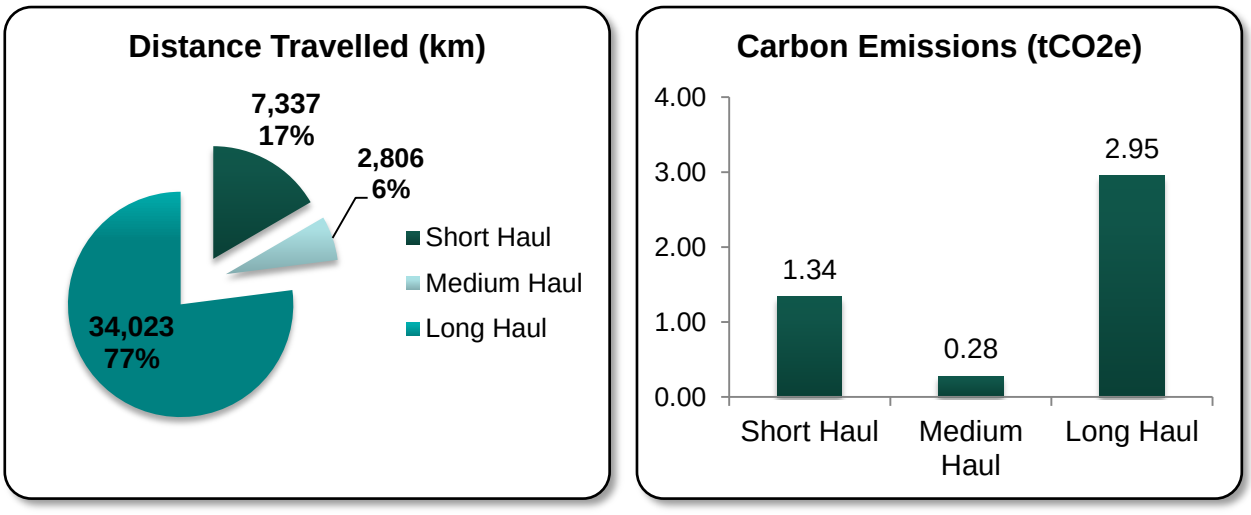
Apart from cycling and walking, this was the least carbon intensive form of travel used to attend the conference.



Air Travel

Per km, short haul air travel is the most carbon intensive, then medium haul, with long haul the least intensive per km. However, this is dependent on the seat class of travel e.g. economy, business, or first class; for this calculation it was assumed that all flights taken were economy seats. One long-haul flight made up the majority of distance travelled to attend the conference, followed by 8 domestic flights and 1 medium haul flight.

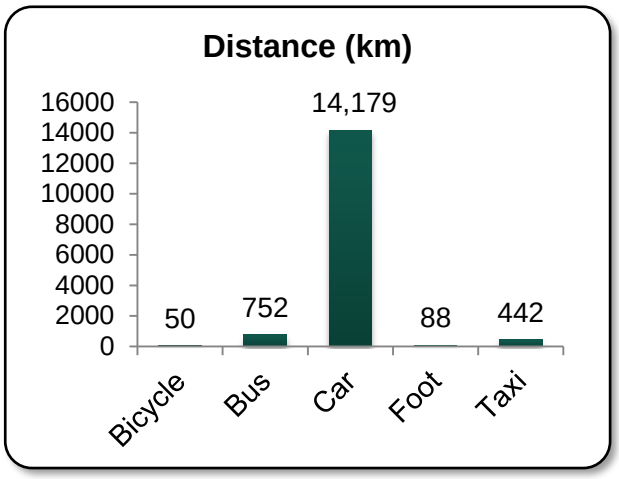
The relationship between the total distance for each journey type is also seen in the carbon emissions, where long haul is the largest contributor, followed by short and then medium haul.

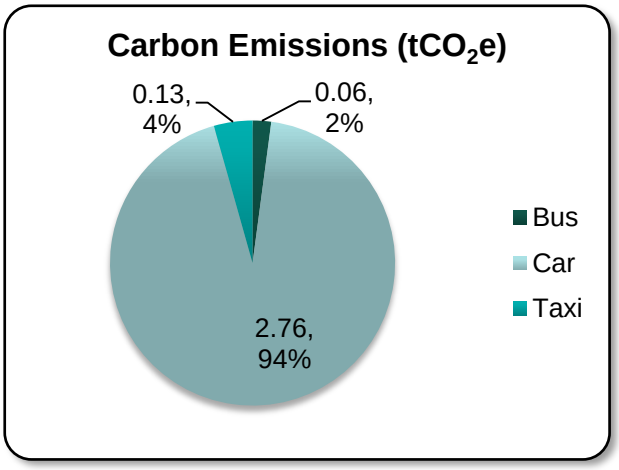


Road Travel

The majority of road travel was by car and this accounted for the largest source of road travel carbon emissions. The majority of taxi travel was a result of people travelling from Nottingham train station to the university campus.

A total of 88 km was associated with people traveling by foot, including people who said they were walking from Nottingham train station and those who lived locally. 50 km was also cycled and both these forms of transport have no associated carbon emissions.





Further Information

We hope that this report has been both informative and interesting and will help future decision making when considering the environmental impact of attending conferences and events.

If you would like to find out more about how your organisation can calculate its carbon emissions or for further information about Greenstone's carbon accounting tool, Acco$_2$unt, which was used to calculate the EAUC footprint, you can visit our website at www.greenstonecarbon.com or contact Katherine Prove at kprove@greenstonecarbon.com.