EAUC BOARD PAPER
Title: Carbon Benchmarking
Paper No: 04.12.02

For Decision

Background
The Board set a KPI in 2013 as "To benchmark our carbon with similar organisations - 3 Charities and 3 Companies/Universities". We commissioned a consultant (IAB Consultants) to assist with this work and the findings are below.

Report
A variety of institutions and similar organisations were reviewed to assess comparability with our own carbon reporting to assess which are the most closely aligned. However, the review highlighted that there are no organisations that have sufficient data and/or are similar in operations to be comparable to provide a meaningful benchmark. The following organisations were included in the review:

INFORMATION ON ORGANISATIONS

Organisation	**University of Gloucestershire**
Link	http://insight-dev.glos.ac.uk/sustainability/Documents/Stratcarbonstrategy.pdf
Description	The University of Gloucestershire (UoG) has developed a Carbon Strategy for the period 2010-20 This document provides the following information (2008/09): • Total Buildings CO_2 for heating and electricity = approx. 4500tonnes CO_2 • Approximately 4.75tonnes CO_2e per FTE (CO_2e collective way of expressing a number of greenhouse gases)
Comparison	• There are many discrepancies when comparing these figures however the tonnes CO_2 for EAUC per FTE is 1.5. • Note that for EAUC the measurement is in CO_2 tonnes compared to CO_2e tonnes for UoG

Organisation	**The University of Nottingham**
Link	http://www.nottingham.ac.uk/about/documents/carbonmanagementplan2011.pdf
Description	Looked at the University of Nottingham (UoN) Carbon Management Plan (CMP) 2010-2020 They have carbon emissions for the period 2009/10 for different areas of the University broken down by m^2 (page 17). Their baseline covered Oil, Gas, Electricity, Coal and Transport. An example from the UoN on page 17. The Business School North (SMF) Floor area m^2 3,936 Elec (kWh) 403088 kWh/m^2 102 kgCO_2/m^2 56
Comparison	• It was useful to see information on a particular school/unit in terms of m2 - University of Gloucestershire did not report this way in their CMP. • Can't compare building types • EAUC 2012 figures, UoN 2009/10 • Difficult to verify what is and is not included or approach to calculations • EAUC figures (Cheltenham only) Floor area m^2 45.12 (as provided)

	Elec (kWh) - kWh/m^2 - $kgCO_2$ 740 (as provided) $kgCO_2/m^2$ 16.40 (calculated $kgCO_2$/floor area m^2)

Organisation	Environment Agency
Link	http://www.environment-agency.gov.uk/static/documents/EA_Website_Environmental_Graphs_2012-13_v2.pdf
Description	Environment Agency (EA) provide tonnes carbon dioxide emissions from 2006-13 these are split across a variety of functions. CO_2 emissions = 57,209 tonnes (22117 tonnes from pumping water) 39% CO_2 emissions = operational electricity (including pumping water) 23% = Buildings Energy 14% = Operational Vehicles 13% = Plant and equipment fuel 7% = Cars 3% = Train 1% = Boats 0% = Air **Additional information provided includes:** Carbon emissions from buildings = 11,644 tonnes Mains water consumed = 48,349m^3 Waste sent to landfill = 34,449kg Total waste produced = 653,453kg Vehicle Mileage = 40,656,426 miles
Comparison	• No reference by EA to area of buildings or number of staff therefore difficult to do comparison • Difficult to know detail behind measurements to enable a comparison • % split is provided by EA but different aspects measured (see below) EAUC total tonnes (2012) CO_2 = 13.335 % split for EAUC 0.4% = Waste 0.2% = Water 39% = Heating and Lighting 54.9% = Travel 5.5% = Electricity

Organisation	Institute of Environmental Management and Assessment (IEMA)
Link	http://www.iema.net/company-information
Description	As part of their 2011 Annual report there is the IEMA GHG Balance Sheet 2011 (page 19) which includes information on Global tonnes CO_2e. This covers items such as: 1. Emissions (fridge, AC, water cooler, gas purchased) 2. Electricity purchased 3. Business travel 4. Travel to work 5. LCS and Consultant travel to work **Total Gross Emissions** is provided based on this information for 2011 it equalled **82.239**

Comparison	• EAUC figures based on $kgCO_2$ not CO_2e (collective way of expressing a number of greenhouse gases) • No values for space or numbers of staff provided for IEMA

Organisation	**Forum for the Future**
Link	http://www.forumforthefuture.org/sites/default/files/images/annual%20report%202012.pdf
Description	• There is a brief environmental report (1/2 page statement) within the 2013 (on 2012 figures) annual report. • It states that they offset all their carbon emissions (269 tonnes) for 2012 (travel, waste and energy). They implemented changes to ravel policy as part of their ISO14001 Environmental management system in 2011 and anticipate that saved them needing to offset 44tonnes in 2012.
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Organisation	**Higher Education Academy (HEA)**
Link	http://www.heacademy.ac.uk/
Description	No evidence of carbon reporting within their Annual Report for 2011/12
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Organisation	**NUS**
Link	http://www.nus.org.uk
Description	No evidence of reporting on carbon emissions for NUS as an organisation
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Organisation	**Living Streets**
Link	http://www.livingstreets.org.uk/sites/default/files/content/general/AGM/2012%20Annual%20Report%20and%20Accounts.pdf
Description	There is no reference in the annual report to carbon reporting
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Organisation	**Sustrans**
Link	http://www.sustrans.org.uk/sites/default/files/file_content_type/sustrans_annual_review_2012-13_0.pdf
Description	The annual review for 2012/13 did not include any reporting on carbon for the organisation but did report on savings associated with the services/projects they delivered.
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Organisation	**Oxfam**
Link	http://www.oxfam.org.uk/what-we-do/about-us/plans-reports-and-policies
Description	Nothing detailed set out in annual report.
Comparison	Not possible to provide a comparison with EAUC due to a lack of information

Recommendations

Following the research we propose 3 options available to the Board in setting a carbon KPI:

1. Approach Educational Members to seek a comparable stand along unit that reports on carbon for that unit. Examples could be a stand alone research unit or enterprise unit where carbon is recorded isolated from the host institution. In order for this to be comparable it would need to be a similar sized office based unit which has regular UK travel and some international travel.

2. Approach similar NGO's to work together to compare and benchmark. As many similar sized NGO's do not report on their carbon this may take some time to achieve. In order for this to be comparable it would need to be a similar sized office based unit which has regular UK travel and some international travel.

3. Review the KPI and abandon the idea on benchmarking. Previously the Board has discussed setting targets to reduce carbon, however the Board agreed that as there are limitations on areas of our control that this could have a negative effect on the organisation as travel is the main area for potential to reduce. However, with an increased focus on Membership interaction an increase in travel will take place. Rather than setting targets to reduce, the carbon KPI could be to publically report and review year on year our own usage.