‘Stop the bus, we want to get on!’
Drivers of Education for Sustainable Development and Global Citizenship (ESDGC) in Welsh Higher Education.

Alison Glover

Centre for Excellence in Learning and Teaching, University of Wales, Newport, Lodge Road, Caerleon, South Wales, NP18 3QT. Email: alison.glover@newport.ac.uk

Abstract

The Talloires Declaration made by University Administrators in 1990 saw the real emergence of a raised and recognised profile of the importance of sustainability within the higher education arena. Prior to this the first mention of sustainability in higher education, in the international context, was highlighted by the United Nations in 1978, UNESCO – UNEP International Environmental Education Programme. Today documents and declarations continue to emerge in the endeavour to achieve effective sustainable development.

The Welsh Assembly Government published One Wales: One Planet in May 2009, outlining their commitment to embedding sustainable development as an organising principle across Wales within the vision of a ‘transformed Wales’. For Our Future was also published in 2009 and identified aspirations for Welsh higher education. The role of Education for Sustainable Development and Global Citizenship (ESDGC) within higher education is fundamental in realising the visions proposed in these Assembly publications. Welsh higher education has placed increasing importance on ESDGC in recent years. A review of environmental management systems and an audit of ESDGC curriculum content complied with requirements of the Welsh Assembly Government and the Higher Education Funding Council for Wales. However, are there measurable indicators that reflect progress in effective sustainable development and global citizenship within an institution and across the Welsh higher education sector as a whole?

This paper focuses on the findings of recent research reviewing and analysing the relevance and validity of some existing measurable indicators for sustainability. Since 2005 the Green Gown Awards have recognised higher education’s achievements in this area. The People and Planet Green League table was first published in 2007, with higher education institutions submitting information each year to be congratulated on their improvements and exposed for their inactions. Annually higher education institutions participate in environmental management schemes and citizenship awards. This research endeavours to discover whether measurable progress in the higher education sector corresponds with the drive for a sustainable vision by the Welsh Assembly Government.

Keywords: ESDGC, global citizenship, impact, measurable indicators, sustainability, Wales.
Introduction

Governments adopting sustainable development policies are beginning to expect action from within different sectors. Many have stated that society, education and particularly higher education have a vital role to fulfil in the drive for sustainability (Orr, 1994; Cortese, 1999; Tilbury, 2004; Gough and Scott, 2007). As Cortese pointed out higher education institutions ‘are significant leverage points which both reflect and inform social mindsets’ (Cortese, 1999, p. 9). Bearing this in mind the potential for higher education to lead the way in modelling sustainability should be embraced and as it is those with qualifications that are leading society down the ‘unsustainable route,’ something needs to change (Cortese, 2003, p. 16; Orr, 1994, p.8). Higher Education Institutions continue to sign declarations such as the Talliores Declaration and more recently participate in sustainability performance awards such as the Green Gown Awards and the People and Planet League Table.

Previous research discovered that the signing of declarations did not necessarily result in action. Walton (2000) found very little progress in implementing environmental initiatives and there was a lack of evidence as to any relevant importance in the signing of the Talliores declaration. The key driving force within institutions was discovered to be ‘enthusiastic individuals, particularly those at senior management or directorate level’ (Walton et al., 2000, p. 515). Recently there has been an increase in sustainability awards and initiatives that recognise effective practices. Perhaps it is this form of driver which will result in further transformation. Conclusions drawn following an audit of the curricula at the University of Gävle, Sweden, resulted in a raised profile for sustainability (Sammalisto and Lindqvist, 2008). This reinforced earlier recommendations by Wright that monitoring is essential if there is to be success (Wright, 2004, p. 18). However, any monitoring must be robust and accountable (Tilbury and Wortman, 2008, p. 10). This paper aims to review and analyse some of the awards, which appear to be drivers for sustainability awareness and initiatives, particularly in Wales. It will determine whether they can successfully fulfil the task of being measurable indicators of sustainability.

The Drivers

Important drivers of initiatives within Welsh higher education are illustrated in Figure 1. The focus for this paper is accreditation and awards, as they may provide clear measurable indicators of progress and continuous drive for progress within this area. The awards and measures to be investigated are represented in Figure 2.
Figure 1. Some of the main drivers within higher education in Wales.

Figure 2. The ESDGC drivers under discussion.

People and Planet Green League Tables

There are 140 institutions with People and Planet groups, 69 of which are in higher education. According to People and Planet’s University Group List six Welsh universities have a group, however, only Cardiff and Swansea University had a direct web link to their own People and Planet information (People and Planet, 2010a).
In 2007 the first People and Planet Green League Table was published. This was the result of the organisation promising they would ‘applaud genuine progress and expose inaction, and will sustain this effort until good environmental performance is the norm, not the exception, in the sector’ (People and Planet, 2006, p. 2). As a result of there being little published transparent information by which to achieve such a task People and Planet created the league table to fulfil several aims; to identify institutions doing well and those falling behind, to develop a mechanism by which institutions would compete with their ‘green credentials’ thus driving up standards, to provide prospective students with the information to make an informed choice for their future place of study (People and Planet, 2010b). The 2007 league table reviewed data from 120 universities and ranked them using eight different indicators. In 2008 the criteria were amended slightly, and 129 institutions ranked. 2009 saw another slight adjustment to the criteria and 131 institutions assessed. It is important to note that alongside the amendment to the criteria listed, within individual criterion elements required also altered. The reasoning behind this was to not produce a ‘box ticking’ exercise, but to award improvement and continually raise the required standard.

The method of data collection to create the league tables involved institutions completing a questionnaire and an analysis of environmental management systems data provided via the funding bodies. The self completion exercise could be accused of not being independent and liable to bias, yet People and Planet endeavoured to ensure accuracy by requiring institutions to provide evidence that verified their responses. Following analysis, institutions were ranked applying the class of degree awarded, thus ranging from ‘First Class award’ to ‘did not sit exam – no award’. Each year the Green League Table is published in The Times Higher.

According to the summary of the 2007 Green League only 26% of higher education institutions in the United Kingdom had conducted an environmental audit, less than half had a full-time member of staff dealing with environmental policy and 22.5% of institutions did not have an environmental policy (People and Planet, 2010b). This was the case even though the United Kingdom Government report of 1993 (Toyne Report, 1993), required all institutions to develop such a document as well as become accredited to an environmental management system standard. The People and Planet team also identified inconsistencies in environmental statistical data, with different approaches to data collection applied each year. It was proposed that if external auditing existed data would be verified and in 2007 it was hoped this type of legislation would happen in the future (People and Planet, 2010b). However, a key issue affecting the authenticity of the 2007 league table was the fact that many amendments were submitted after the deadline. Consequently, there must be concern as to the accuracy and validity of the resulting table. Nevertheless, the profile of sustainability was raised, and it provided a start to make sure institutions were accountable and good practice celebrated.

The raised profile continued over subsequent years with the 2008 league table seeing an increase of nine more institutions participating. There was a dramatic increase in the proportion of institutions possessing an
environmental policy (97%), an increase in full-time environmental staff and those conducting environmental audits had more than doubled. Since the 2007 data collection by People and Planet 71% of institutions had cut Carbon emissions (People and Planet, 2010c). The reliability of the results and published rankings must continue to be queried as external auditing was still lacking.

It was more straightforward to analyse 2009 data with more vigour, as the results for each institution were itemised (People and Planet, 2010d). Almost all universities possessed an environmental policy with a further increase in the number of full-time staff appointed responsible for environmental issues. Ethical Investment had been introduced as a criterion in 2008 and those with a policy in this area had doubled since, however, fewer than 30% of institutions achieved this. Still, the environmental management statistics were not externally audited. Nevertheless, the number of participants continued to rise, reflecting the importance placed on the league table by institutions as a worthwhile activity to be involved with.

Each year the People and Planet group criticise the methodology of institutions and possible lack of authenticity regarding the accuracy of some of the data, as it is not subject to external auditing. Nevertheless, it is apparent that the league tables receive such media coverage they act as a key driver in the progression of the sustainability credentials of higher education institutions. The participation and results of Welsh higher education institutions has also seen a change since the league tables began. Table 1 presents a summary of the rankings and total scores for the criteria since 2007 for Welsh higher education.

<table>
<thead>
<tr>
<th>University</th>
<th>2007 Rank</th>
<th>Score/50</th>
<th>2008 Rank</th>
<th>Score/60</th>
<th>2009 Rank</th>
<th>Score/70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberystwyth</td>
<td>97</td>
<td>11</td>
<td>53</td>
<td>32.5</td>
<td>76</td>
<td>31.5</td>
</tr>
<tr>
<td>Bangor</td>
<td>60</td>
<td>24</td>
<td>40</td>
<td>35.5</td>
<td>28</td>
<td>41.5</td>
</tr>
<tr>
<td>Cardiff</td>
<td>82</td>
<td>18</td>
<td>84</td>
<td>25.5</td>
<td>17</td>
<td>44</td>
</tr>
<tr>
<td>Glamorgan</td>
<td>4</td>
<td>43</td>
<td>13</td>
<td>45.5</td>
<td>12</td>
<td>47</td>
</tr>
<tr>
<td>Glyndwr</td>
<td>**</td>
<td>**</td>
<td>119</td>
<td>16.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lampeter</td>
<td>97</td>
<td>11</td>
<td>**</td>
<td>126</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Newport</td>
<td>22</td>
<td>36</td>
<td>43</td>
<td>34.5</td>
<td>44</td>
<td>38.5</td>
</tr>
<tr>
<td>Open Uni</td>
<td>*</td>
<td></td>
<td>75</td>
<td>27.5</td>
<td>107</td>
<td>22</td>
</tr>
<tr>
<td>Swansea</td>
<td>46</td>
<td>28</td>
<td>74</td>
<td>28</td>
<td>65</td>
<td>34.5</td>
</tr>
<tr>
<td>Swansea Met</td>
<td>27</td>
<td>34</td>
<td>17</td>
<td>43.5</td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>Trinity</td>
<td>*</td>
<td>118</td>
<td>8</td>
<td>122</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>UWIC</td>
<td>71</td>
<td>21</td>
<td>41</td>
<td>35</td>
<td>94</td>
<td>27</td>
</tr>
</tbody>
</table>

Table 1 Welsh Higher Education and Green League Table Results (2007-2009).
* Not listed ** Insufficient data provided to rank

The impact of the Green League tables has been varied in Wales, with contrasting results emerging across the sector and in some cases within the
same institution. People and Planet amend and, in most cases, raise benchmarks within criteria each year. As a result, in 2007 seven of the nine Welsh universities gained credit for an Environmental Policy, yet by 2008 this had fallen to six achieving the expected standard and four awarded ‘could do better’, in 2009 five ‘achieved’ and three ‘could do better’. This highlights the difficulties universities face in meeting the amended criteria each year. Yet it is vital institutions do not get complacent with their successes and are continually aiming higher. However, the issue concerning late submission of data and inaccuracies does question the authenticity of the resulting league tables. Despite this, institutions appear keen to participate and promote achievements within their marketing.

Green Gown Awards

Currently 75% of Welsh higher education institutions are members of EAUC (Environmental Association for Universities and Colleges), the environmental champion within Further and Higher Education in the United Kingdom. EAUC’s funding comes from members and the organisation is a registered charity and an incorporated limited company. The Green Gown Awards were originally established by the Higher Education Environmental Performance Improvement (HEEPI) organisation in 2005, which was funded by the Higher Education Funding Council for England. In 2008 the management of the Green Gown Awards transferred to EAUC and the awards aim to recognise initiatives that further and higher education institutions develop in order to improve sustainability.

The adjudication of the Green Gown Awards consists of a written account of the initiative that provides a summary and account of the benefits and significance for the sector. From this entry a short list is created and these institutions submit further information regarding their initiative before final decisions are made by a steering group consisting of members from Universities UK, Scottish Funding Council, Higher Education Funding Council for England, Higher Education Funding Council for Wales, National Union of Students and The Higher Education Academy among others. The final awards are honoured at a ceremony with publicity following in the press and via master classes. Thus, promoting the green credentials of the institutions involved to a wider stage.

For 2010 there were 12 categories for entry these included carbon reduction, courses, student initiatives and social responsibility. Since their launch the Green Gown Awards have increased the number of categories from six in 2005 to 12 in 2010, therefore the number of winners and highly commended has also increased. Table 2 lists the number of entries and awards each year, Welsh numbers provided in brackets. The number of entries has increased more than six-fold since 2005 and at the same time the number of categories offered for entry has doubled. Welsh representation has also increased, although an institution in Wales is yet to win a category (figures for Welsh entries for earlier years unavailable). Six Welsh institutions were shortlisted for the 2010 awards.
<table>
<thead>
<tr>
<th>Year</th>
<th>Total number of entries</th>
<th>Total number of Awards</th>
<th>Winners</th>
<th>Highly Commended</th>
<th>Number of categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-5</td>
<td>Not available</td>
<td>16</td>
<td>6</td>
<td>10 (1)</td>
<td>6</td>
</tr>
<tr>
<td>2005-6</td>
<td>27</td>
<td>16</td>
<td>7</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>2006-7</td>
<td>54</td>
<td>21</td>
<td>7</td>
<td>14 (1)</td>
<td>7</td>
</tr>
<tr>
<td>2007-8</td>
<td>130</td>
<td>19</td>
<td>9</td>
<td>10 (1)</td>
<td>8</td>
</tr>
<tr>
<td>2008-9</td>
<td>178</td>
<td>28</td>
<td>12</td>
<td>16 (3)</td>
<td>12</td>
</tr>
<tr>
<td>2009-10</td>
<td>190 (9)</td>
<td>30</td>
<td>12 (2)</td>
<td>18 (1)</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 2. Summary of Green Gown Awards since 2005.

Higher Education Carbon Management Programme

The Carbon Trust was established in 2001 as a not-for-profit company, receiving funding from government departments, including the Welsh Assembly Government. Since 2005 the Carbon Trust has been working with higher education institutions; University of Wales, Aberystwyth were part of the first phase (2005-06), University of Wales, Cardiff, University of Wales, Newport and UWIC were part of the second phase (2006/07).

The Carbon Trust Standard was developed in 2007 and included measuring Carbon footprint, Carbon management and reducing Carbon emissions. During the first three years of the higher education sector becoming involved over 264,000 tonnes of Carbon emissions per year have been saved across the sector, saving £52 million per annum, of the 63 higher education institutions that quantified their savings this equates to £825,000 per annum per institution (Evans, 2010).

Assessment and accreditation costs for the Carbon Trust Standard depend on the energy expenditure of the organisation. For institutions of similar size to the University of Wales, Newport, with annual energy expenditure between £500,000 and £1.5million certification only would cost £5,000 (plus VAT) with assisted certification costing £8,000 (plus VAT) (Carbon Trust, 2010a). Institutions form a partnership with the Trust to work through the programme, which takes 10 months. Successful completion does not necessarily mean accreditation and listing as a standard bearer. Currently 96 public sector bodies are listed with 13 of these English and Scottish higher education institutions (Carbon Trust, 2010b).

ISO 14001 Environmental Management Standard

The International Organisation for Standardisation is a non-governmental organisation having 160 national standards institutes as members. ISO 14000 provides a ‘family’ of environmental management standards to be implemented within any organisation (ISO, 2009, p. 2). The member of the International Organisation for Standardisation for the United Kingdom is the
British Standards Institute. In 1991 ISO established a Strategic Advisory Group on Environment (SAGE) and following the 1992 United Nations Rio Conference on the Environment the ISO responded to the challenge of ‘sustainable development’ by launching the ISO family of standards for environmental management (ISO, 2009, p.4). The ISO 14001 appears to be the most recognised of the environmental standards and is listed as a creditable requirement for the People and Planet League tables. Yet within the ISO 14000 ‘family’ there are several other standards, which are also continually developing, for example, ISO 14031 Environmental Performance and ISO 14005 Phased Implementation of an Environmental Management System (ISO, 2009, p.9).

The University of Glamorgan was the first University in the United Kingdom to be awarded the ISO 14001: 2004 accreditation. Cardiff University has been awarded ISO 14001 for one of its campuses and is working towards achievement elsewhere. University of Wales Institute, Cardiff is also working towards accreditation. At the University of Wales, Newport, the Environmental Management System is compiled to meet the requirements of ISO 14001, costing £6,000 per annum for audit by a certification company (University of Wales, Newport, 2010a, p11). The cost of the external accreditation is dependent on the size of an institution. Yet the international recognition of the standard, which provides a framework for environmental management, should result in cost savings and prestige for an organisation when dealing with partners, suppliers and stakeholders, thus mitigating auditing and certification costs. However, strong leadership and commitment to the process is required if such a cost is to be financed and this could be seen as prohibitive.

In 2008 the Higher Education Funding Council for Wales requested the development of an environmental management system by all Welsh Higher Education Institutions. It is possible that in the future funding may be linked to accreditation to certified schemes, however, in 2008 no particular system was stipulated, yet ‘all systems utilised by Higher Education Institutions should obtain external certification to a recognised standard within a period of three years’ (Higher Education Funding Council for Wales, 2008, p. 6). Maybe the strength of the requirement will alter from ‘should’ to ‘must’ as the Welsh Assembly and the Funding Council drive this agenda further.

Green Dragon Awards

The Green Dragon Environmental Standard provides a five staged accredited approach to environmental management, awarded by Groundwork Wales. A registered charity, Groundwork Wales aims to build sustainable communities across Wales, receiving funding from a variety of sources including the Welsh Assembly Government (Groundwork in Wales, 2010). Currently the Welsh Assembly Government are accredited with Level 5 requirements for the Green Dragon Award, the Higher Education Funding Council for Wales accredited Level 2 and Bangor University Level 3. The cost of accreditation is dependent on the time it takes to assess the organisation, currently (2010) fees of £300 per day.
A key element of the Green Dragon Awards is that organisations are recognised for the steps made as they work towards recognition of the ISO 14001. Infact Groundwork Wales states ‘organisations who have reached Level Five may be successful in obtaining ISO 14001’ (Groundwork in Wales, 2010).

Universities that Count

Universities that Count provides a benchmarking tool and performance improving programme focused on higher education. Initially the Higher Education Funding Council for England funded a pilot study of 25 institutions (2005-06) lead by EAUC and in partnership with Business in the Community and CSR Consultancy. The aim of the pilot study was to determine the ‘the appropriateness of Business in the Community’s Corporate Responsibility Index and Environment Index for the Higher Education sector’ (Universities that Count, 2009a, p. 3). Following the success of the pilot all funding councils agreed to fund the scheme until 2011/12, when the scheme aims to be self-sufficient (Universities that Count, 2009b, p. 1). The first cohort in 2009 involved 55 higher education institutions, plus the Higher Education Funding Council for England. The Welsh institutions were Aberystwyth University, Swansea Metropolitan University and University of Glamorgan.

The scheme results in higher education institutions comparing themselves with their peers within the education sector and also the business world via feedback and reports generated from online questionnaires which focus on environmental and social issues. The index originated from business and as a result of difficulties encountered during the pilot study many of the questions were rewritten or completely changed to permit examples from the higher education sector (Universities that Count, 2009b, p. 3). However, the submissions were not identical; institutions could submit corporate responsibility and/or environmental data. The aim was not to produce a ‘league table’ of results but ‘to encourage and inform a process of performance improvement, to bring about a radical change in the way universities approach issues of social and environmental responsibility’ (Universities that Count, 2009b, p. 8). As a result, the annual report to emerge for 2008-09 listed the participants but only highlighted the top five performers in focused areas and did not include scores. The fees for 2009/10 were £1000 plus VAT for new participants but if returning £1250 plus VAT.

In order to validate the scheme an independent body assessed and assured the results. Although the outcome of the validation process resulted in an assurance statement the process involved an examination of only 20% of the submissions (Universities that Count, 2009b, p. 74). In a personal view from Jonathan Porritt, included in the final report for 2009, it is unclear whether he is criticising the Universities that Count process or the higher education sector as a whole;

We should indeed celebrate those Higher Education Institutions that have done so well in this year’s Universities that Count benchmark exercise. But as
an observer of the HE scene, it’s all a bit laborious, done inch by inch, without a collective sense of leadership for the sector as a whole. (Universities that Count, 2009b, p. ix)

Whichever stand point Porritt is speaking from it is most certainly valid as only 60% of participants returned to the scheme following the pilot, with the majority selecting to complete the environmental indicators as opposed to the corporate responsibility index (Universities that Count, 2009b, p. 9). Nevertheless, the scheme continues, progress was evident since the pilot and many institutions cited positives to being involved in the scheme (Universities that Count, 2009b, quotes throughout) and the participation levels for 2009/10 will be viewed with interest.

Envirowise

Envirowise is a government funded organisation, established in 1994. It offers free and independent support to businesses to enable them to utilise resources more efficiently. The public sector is targeted in Wales and Scotland by Envirowise in a drive to minimise waste. Part of this campaign has been the awarding of ‘Green Stars’ each month, identifying people and teams who make a positive contribution to the amount of waste thrown away. The University of Wales, Newport was awarded one of the six Green Stars awarded to date and is the only higher education institution acknowledged (Envirowise, 2010). Part of the drive to improve efficiency involved a sustainability conference and awards event in 2010. Twenty-nine applications were received for the awards with the University of Wales, Aberystwyth, University of Wales, Newport and Swansea Metropolitan University among 12 shortlisted for five categories. Newport was the only higher education institution to be successful, winning the innovations award for a biodiesel project. This award ceremony and winners received publicity and on achieving the award the University of Wales, Newport very quickly announced the award via the website news. This reiterates the fact that higher education institutions view accreditation and awards as important for the image of the institution and in assisting the drive to attract future students.

Conclusion

Participation in many of the aforementioned schemes and awards has increased in recent years, for instance nominations for the Green Gown Awards has risen six-fold since 2005. However, whether this reflects more institutions adopting new strategies for sustainable development or acknowledging initiatives already existing is not necessarily evident. Whichever is the case it is apparent that the desire for public recognition of sustainability initiatives in the higher education sector has increased and continues to do so. The reasons for such growth in participation are driven from a variety of sources from funding requirements stipulated by the funding councils to initiatives from staff and students. The longer-term financial savings resulting from carbon management programmes appear to justify the initial investment, as more higher education management teams engage with the programmes. Although the funding councils appear to be driving change
and institutions appreciate the financial savings, the public's perception, particularly of future students, means institutions are eager to emphasise their engagement with ESDGC.

The schemes discussed focus on the environmental management within institutions and this appears to dominate certification and accreditation criteria. Reasons for this include the quantifiable data required in this field being easier to obtain and measure progress and change over time. Nevertheless, elements of the Green Gown and Green League Tables do recognise global citizenship issues and other organisations focus specifically on citizenship. For instance, Cyfanfyd, an organisation funded by the Department for International Development and various charities (including Oxfam and Christian Aid), support organisations as they incorporate a global perspective into teaching programmes. Cyfanfyd’s Global Learning Awards are run in partnership with NIACE Dysgu Cymru and value the introduction of the global perspective, which address world inequalities and sustainability to the community (Cyfanfyd, 2010). Since 2006 between five and ten nominations are received each year, with one or two of these from the higher education sector (Miles, 2010). Swansea Metropolitan University was recognised with an award for the UK's first 'Living Sustainably' Module in 2007.

The Welsh Assembly Government provides funds for many of the awards discussed, practically assisting in driving the sustainability agenda forward. Generally, there has been an increase in interest and participation in recent years and this can only be a positive move for ESDGC in the higher education sector. All the schemes and awards highlighted fulfil a dual function in that they drive initiatives to progress ESDGC and simultaneously recognition of achievements drive and motivate further actions. Such positive feedback stimulates a continual spiral of action and success, providing a tool to mobilise higher education's environmental and citizenship responsibilities further.
References


EVANS, C. (customercentre@CarbonTrust.co.uk). 15 January 2010. Contact form. [E-mail]. E-mail to A. Glover (Alison.Glover@newport.ac.uk). (16 January 2010).

HIGHER EDUCATION FUNDING COUNCIL FOR WALES. 2008. *Education for Sustainable Development and Global Citizenship (ESDGC)*. W08/07HE.


MILES, D. (dominic@cyfanfyd.org.uk). (25 January 2010). *Global Learning Awards*. [E-mail]. E-mail to A Glover (Alison.Glover@newport.ac.uk). (27 January 2010).


PEOPLE AND PLANET. 2010a. *University Groups List*. 

12
http://peopleandplanet.org/universities/groupslist/?todo=list (2 February 2010).


UNIVERSITIES THAT COUNT. 2009b. Report 2009 The Environmental and Social Responsibility Benchmarking Programme for Performance Improvement in UK Higher Education. EAUC.