

Cylchlythyr | Circular

Carbon Management Policy

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Reference: W13/38HE
To: Heads of higher education institutions in Wales
Response by: **17 January 2014**
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This consultation circular seeks the views of institutions on the introduction of a requirement to develop and maintain a publicly available summary carbon management strategy. It is proposed that this document would set out the ambitions of the organisation in terms of carbon and energy reduction, the intended actions to progress this agenda, together with an annual progress report.

The consultation seeks to build on the work previously undertaken by the Carbon Trust Wales and HEFCW in 2012/13 which provided institutions with individual reports on their performance in this area.

If you require this document in an alternative accessible format, please telephone us on (029) 2068 2225 or email info@hefcw.ac.uk.



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Introduction

1. The intention of this approach is to support effective carbon management which will enable universities in Wales to demonstrate their aspirations to reduce carbon emissions, and report on progress in a transparent and consistent manner. This approach should also demonstrate how the sector is embedding previous advice provided by the Carbon Trust Wales, particularly the 2012/13 Carbon Management Status Report.
2. The Welsh Government has already established policies and ambitions around carbon reduction¹ which are consistent with the carbon budget developed by the UK Government as part of the Climate Change Act 2008² with an intention of securing a reduction of 80% in carbon emissions by 2050 based on 1990 levels. The requirement to reduce carbon emissions and improve energy efficiency is being developed through increased taxation, reporting requirements, and the introduction of green levies to support the development of low carbon energy sources. These initiatives have perhaps been over shadowed by significant increases in energy cost with expenditure on energy in Welsh universities increasing from £11m in 2003/04 to over £20m in 2010/11³.
3. Universities in Wales are already contributing significantly to the carbon reduction agenda through research in particular the Low Carbon Research Institute, and Climate Change Consortium Wales. There is also evidence to show that universities in Wales have had some success in controlling carbon emissions despite significant expansion in student numbers, and increased levels of research in recent years. In 2012 Carbon Trust Wales noted that between 2003/04-2010/11 student numbers and floor area of the HE estate in Wales both increased by 17% but that energy consumption had increased by only 5% during this period indicating an overall improvement in efficiency.

Background

4. In 2012/13 HEFCW and the Carbon Trust Wales commissioned the Higher Education Carbon Management Review (HECMR). The project examined carbon management practice at each of the Welsh universities and assessed this against eight key features of effective carbon management to enable comparison across the sector and other public sector organisations. All institutions were provided with confidential individual reports setting out detailed recommendations for potential improvements. A sector-wide report was also produced principally for consideration by HEFCW and the Welsh Government.

¹<http://wales.gov.uk/topics/environmentcountryside/climatechange/emissions/publicsector/?lang=en>

² <https://www.gov.uk/government/policies/reducing-the-uk-s-greenhouse-gas-emissions-by-80-by-2050/supporting-pages/carbon-budgets>

³ HESA Estate Record.

This [report](#) was presented to HEFCW Council in September 2013 which made the following recommendations;

- i. that carbon management should be included in the institutional risk review processes from 2014-15 as part of the estates assessment;
- ii. that institutions should be required to have an appropriate carbon management strategy in place, published on their website, including identified targets, prioritised potential projects, annual reporting and identified resources;
- iii. that HEFCW would expect institutions to identify improvements to their metering infrastructure as part of their carbon management strategies, with an aspiration to achieve directly metered energy use for all buildings greater than 1000 square metres; and
- iv. that HEFCW should continue to work in partnership with Carbon Trust Wales and other bodies to provide support and to signpost external public and private funding sources available to the sector.

Approaches to Carbon Management

5. The remainder of this paper concentrates upon the implementation of recommendations (i to iv) above.
6. There already exists significant guidance as to how carbon management plans should be developed and it is not the intention of this policy to repeat this or add to it⁴. Similarly our view at this stage is that that it would be unhelpful to provide a specific format for a carbon management plan, recognising that many institutions already have plans in place or under development following recent mergers. We have therefore focussed on the development of an approach to carbon management specifying minimum content and approach rather than developing a detailed methodology.
7. HEFCW is continuing to work with Carbon Trust Wales, the Environmental Association for Universities and Colleges and Salix Finance (a not-for-profit company funded by DECC, The Welsh and Scottish Governments). It is our intention to hold a seminar early in 2014 to assess sector interest in creating a dedicated Salix interest free spend to save fund to support institutions in funding appropriate carbon reduction projects. We are mindful of the relatively low take up of this form of funding in the past in Wales and wish to consider whether this can be addressed by putting in place a more flexible arrangement which will better meet the needs of universities in Wales.

⁴ See Annex 2 for suggested guidance on the development of carbon management strategies.

Achieving consistency and transparency

8. Table 1 below sets out our logic and approach in developing the minimum specification for a carbon management summary strategy shown at Annex 1. We would welcome your comments on the approach adopted below or on the more specific requirements within the specification provided at Annex1.

Table 1

1	<p><u>Ambition</u></p> <ul style="list-style-type: none">Increasingly corporate organisations are expected to demonstrate leadership, commitment and performance in relation to the carbon reduction agenda. Acknowledging the very different constraints and challenges faced by individual universities we believe that the level of ambition in terms of carbon reduction should be a matter for individual institutions to establish, publish, and support with a quantified level of resources sufficient to deliver the ambition based upon the opportunities available to them. This should reflect upon national policy, and stakeholder requirements. The level of ambition should be influenced by strategic plans, the potential for cost saving / avoidance both in the short term but also in the longer term given the expectation of increased energy and carbon costs⁵.
2	<p><u>Scope</u></p> <ul style="list-style-type: none">In defining the scope of a carbon management strategy we are mindful that in most cases all material scope 1, and 2 data (as defined by the Greenhouse Gas protocol⁶) is already collected through the Higher Education Statistical Agency (HESA) Estate Record and increasingly scope 3 data will be collected in this way. We consider that this should in most cases form the basis for carbon reporting as it provides a consistent basis of collection, division and calculation across all UK HE institutions.Scope 3 carbon reporting is a relatively new area which we believe is insufficiently developed currently to merit mandatory inclusion of all aspects- although we would encourage those institutions that wish to include further detail in this area to do so in a manner that is consistent with the existing HEFCE guidance⁷. Limited inclusion of data on university business

⁵https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/239937/uep_2013.pdf

⁶www.ghgprotocol.org/calculation-tools/fag

⁷https://www.hefce.ac.uk/media/hefce1/pubs/hefce/2010/1002/10_02.pdf

	<p>travel, and water consumption and associated carbon emissions should be included (see section on reporting).</p>
3	<p><u>Context</u></p> <ul style="list-style-type: none"> • This section of the summary strategy should enable the reader to understand the particular challenges or constraints that the university faces as well as providing supporting evidence for the approach adopted. This should include reference to historic performance, resources applied to carbon reduction, as well as demonstrating effective linkage to wider policies which assist in carbon reduction such as space management policies, capital investment programme, and refurbishment standards. This section should also outline reporting structures and governance arrangements to demonstrate how carbon management is effectively linked to the overall management and development of the university. Reference should also be made to potential future opportunities where this precludes more immediate action.
4	<p><u>Proposed Improvements</u></p> <ul style="list-style-type: none"> • The HECMR clearly identified a number of areas where institutions could make progress in their approach to carbon management. We would expect the carbon management plan to demonstrate how and when these measures will be implemented or justification for the adoption of an alternative strategy. • The HECMR also recommended that all institutions should look to achieve individual energy and water sub metering for all buildings with a gross internal area of 1000 square metres or larger. The achievement of this standard should be documented within the approach proposed. • In summary this section of the report should clearly identify potential improvements, timescales, capital costs, anticipated carbon savings and pay back periods. • This section should also identify staffing and financial resources dedicated exclusively to this agenda, as further evidence of commitment to the identified level of ambition.
5	<p><u>Reporting</u></p> <ul style="list-style-type: none"> • We propose to allow institutions to choose their own baseline year to reflect individual circumstances and the availability of accurate consumption data. Institutions in England have adopted a fixed baseline date of 2005/06 as the earliest date when reliable information was available. An alternative would be to adopt the Welsh Government baseline which is the average over the period 2005/06-2009/10. We would expect the chosen baseline to be appropriate to the current scale and

	<p>configuration of the university with adjustments if required to reflect mergers. The baseline should form the initial comparator for mandatory annual reporting to be published within six months of the end of the academic year.</p> <ul style="list-style-type: none"> • Reporting as a minimum should cover all scope 1, and scope 2, emissions and consumption using data submitted to the HESA Estate Record .Scope 3 reporting would be voluntary other than in relation to water, and business travel but where adopted should follow the calculation provided within the HESA Estate Record • Comparability of carbon data between years could be maintained by ensuring that all carbon reporting from previous years is updated using current DEFRA conversion figures⁸. Arguably this approach detracts from reality in that it does not reflect actual changes in carbon intensity from year to year. However recent changes to the calculation of carbon emissions arising from the use of grid electricity precludes realistic comparisons with previous years unless this change is made. • Institutions will be required to have an appropriate carbon management summary strategy in place approved by senior management published on their website, including an identified annual carbon footprint target relating solely to the emissions reported. Any target relating to scope 3 emissions should be separately stated. • The annual report should also indicate the level of financial and other resources directly deployed to monitor and reduce carbon emissions. • It is proposed that carbon reporting should not be amended to include degree day reporting although reference to heating days may be included within the report to provide context. • The annual carbon report should include standard KPIs to provide a consistent basis for monitoring progress
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Timetable

9. Institutions wishing to respond to the above proposals and the suggested specification shown at Annex 1 should respond by 17 January 2014.

Further information / responses to

10. For further information, contact Chris Cowburn (tel 029 2068 2247; email chris.cowburn@hefcw.ac.uk). Responses should be forwarded to Sheridan Nott by 17 January 2014 (tel 029 2068 2222; email sheridan.nott@hefcw.ac.uk).

⁸ www.ukconversionfactorscarbonsmart.co.uk/

Assessing the impact of our policies

12. We will be carrying out an equality impact assessment to help safeguard against discrimination and promote equality. We will also consider the impact of policies on sustainability, the Welsh language, and Welsh language provision within the HE sector in Wales. Contact equality@hefcw.ac.uk for more information about Impact Assessments.

Annex 1: Specification

1	<p><u>Ambition</u></p> <ul style="list-style-type: none">• The carbon management plan must state a target figure for all recorded carbon emissions included within the plan over the duration of the plan broken down between residential and non-residential estate (maximum five years), as well as an annual target. The ambition should also include a target in respect of energy, and water consumption reduction, broken down between the residential and non-residential estate. The targets can be expressed as an outright figure, a percentage of the baseline figure, or as a relative improvement EG in relation to full time equivalent student numbers. The ambition should include a separate target figure for scope 3 emissions where these represent more than 10% of total recorded carbon emissions.• This section of the report should include a justification for the level of ambition selected, reflecting on planned strategic developments, relative performance against appropriate standards such as Display Energy Certificates or Energy Performance Certificates, level of resource directly committed to carbon management, and identified opportunities.
2	<p><u>Scope</u></p> <ul style="list-style-type: none">• The carbon management plan must relate to all Scope 1 and Scope 2 emissions as submitted to the HESA Estate Record together with water consumption. Where specific significant sources of carbon emissions are excluded, for example, shared accommodation, this should be clearly identified within the report and any change to this in subsequent years clearly identified.• The strategy should also cover scope 3 emissions arising from institutional business travel. Inclusion of additional scope 3 items is voluntary although it is intended that this aspect will be reviewed in 2016. Institutions are therefore encouraged to include scope 3 emissions where they have robust data and emerging strategies to manage the emissions arising from these activities.
3	<p><u>Context</u></p> <ul style="list-style-type: none">• This should provide the reader with a clear understanding of existing carbon and energy performance, the opportunities that the university has to make improvements and a clear understanding of the challenges it faces. The context should also highlight the governance arrangement surrounding carbon management within

	<p>the university, and how effective carbon management policy influences wider institutional policies around improving student experience, space management, refurbishment standards, and the capital programme. Longer term ambitions should also be explained particularly where they may influence the implementation of short term improvements.</p>
4	<p><u>Proposed Improvements</u></p> <p>The improvement section of the plan should contain the following information:</p> <ul style="list-style-type: none"> • A summary list of proposed carbon reduction projects consistent with the issues identified within the context section of the plan. • The list should indicate budget capital cost, estimated carbon /energy and financial savings. • The source of funding to support the implementation of the proposals. • The timescale within the plan period for their implementation.
5	<p><u>Reporting</u></p> <ul style="list-style-type: none"> • All institutions are required to select a baseline year to provide an effective comparator of carbon, and energy performance. This should reflect as accurately as possible the current configuration of the university. • Consideration should be given to using 2005-06 figures to enable comparison with English Universities, or the Welsh Government baseline which is the average of emissions over the period 2005/06-2009/10. Universities that have recently merged may need to consider amalgamating data to provide a realistic baseline. The baseline should be adjusted to reflect current DEFRA carbon conversion figures although the original figure should be quoted separately to highlight the significance of the changes to the carbon conversion figures for electricity. <p>The carbon management annual report should provide the following minimum information no later than six months after the expiry of the academic year:</p> <ul style="list-style-type: none"> • The actual carbon performance achieved over the previous academic year broken down between residential and non-residential and respective fuels.

	<ul style="list-style-type: none"> • An overview of progress in achieving the annual target listed within the carbon management strategy, and a comparison against the baseline. The report should be sufficiently detailed to cover performance in all of the main areas of carbon emissions. • Where available the report should include analysis against the previous three years figures adjusted to use current DEFRA carbon conversion figures where appropriate. • A commentary on the performance achieved in all significant areas including rationale for over and under performance. • Confirmation as to which of the intended projects has been implemented and any revisions to the intended improvements list for the following year. <p>The annual carbon report should as well as identifying total carbon emissions also include reporting against an agreed list of KPIs as proposed below using Estate Record data.</p> <p>Total scope 1 and 2 emissions per FTE student on the non-residential estate.</p> <p>Total scope 1 and 2 emissions per square metre gross internal area.</p> <p>Total scope 1 and 2 emissions Co2 KG divided by gross turnover.</p> <p>Value of recurrent funding provided to support carbon management divided by utility spend.</p> <p>Total scope 1 and 2 emissions on the residential estate divided by number of bed spaces.</p> <p>Scope 3 reporting in respect of business travel should be identified separately within the report.</p>
6	<ul style="list-style-type: none"> • The project list should identify funding sources, and estimated carbon/energy savings arising from the implementation of the projects. The plan should indicate a timetable for implementation. These improvements should include the actions identified within the individual Carbon Trust Management Status Reports produced in 2012/13 or exceptionally a rationale for why these have not been adopted and appropriate alternatives. This element of the report should also identify the level of dedicated resources available to support the delivery of the strategy in terms of staff resource and funding both revenue and capital as appropriate.

Annex 2: Suggested Guidance on Carbon Management

1. HEFCE Carbon Management Strategies and Plans
www.hefce.ac.uk/pubs/year/2010/201002/name.65923,en.html

2. Carbon Trust Higher and Further Education
www.carbontrust.com/resources/guides/sector-based-advice/further-and-higher-education

www.carbontrust.com/resources/guides/carbon-footprinting-and-reporting/carbon-footprinting

3. Environmental Association of Universities and Colleges (Universities and Colleges Climate commitment for Scotland)
www.eauc.org.uk/ucccf/home

4. DEFRA
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf

5. Greenhouse Gas Protocol
www.ghgprotocol.org/