### Association of University Directors of Estates

#### **Green Scorecard Results**

**Sector Trends** 

ASAC/AUDE/REP/02

Issue | 26 August 2016

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 242173

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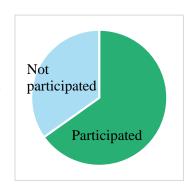
#### **Executive Summary**

Responding to requests from its members, AUDE commissioned the development of a new sustainability metric for the higher education sector aimed at recognising the significant achievements in sustainability, focussing on aspects within the control of Estates functions.

Following extensive consultation, the Green Scorecard and its associated web portal was issued to the sector at the end of May 2016. Whilst no formal deadline date was set, institutions were encouraged to complete their submissions within two months – by the end of July.

A 'data snapshot' was taken on the morning of 1st August which has been used to analyse participation with the scorecard and the performance of the sector.

Overall, 101 universities have actively participated in the scorecard by filling in results, amounting to 65% of those with access to the portal. This highlights a significant level of buy-in within the sector for what is essentially a voluntary exercise which has fallen at a busy time of year for many. The degree of adoption is even higher within research-intensive institutions, with 80% participating.



Also encouraging is the proportion of optional indicators that have been completed. 24 of the indicators are optional and it was thought that institutions would carefully select a small number of these indicators,

restricting their choices to indicators clearly relevant to their situation. Instead, on average, participating institutions completed 19 of the 24 optional indicators. This seems to indicate that the consultation process was a success and has generated a set of indicators with a high degree of relevance.

The average scores returned, particularly within non-EMR indicators suggests that the 'difficulty' of the indicators has been set correctly. An average score of 1.9 (out of 4) indicates that institutions have made progress on the journeys described within the non-EMR indicators but that continued improvement would still be rewarded within the scorecard.

The categories show the following trends:

Lowest Scoring	Transport
Highest Scoring	Management
Greatest difference between score and target	Adaptation
Smallest difference between score and target	Water

In addition to the analysis carried out on the data, anecdotal feedback received has also indicated that the structure of the scorecard has provided universities with a useful framework within which to consider sustainability. In addition, the visual nature of the output diagram has encouraged discussion and debate into the detail behind the headline scores.

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#### 1 Introduction

The Association of University Directors of Estates (AUDE) was challenged by its members to produce a new way of evaluating sustainability in HEIs, focusing on estates functions, that recognises progress being made.

Following a series of consultation workshops, a new scorecard was produced and made available on a web portal. The 'Green Scorecard' evaluates the sustainability performance within the Higher Education Institutions (HEIs) and provides a framework for continued sustainability efforts, whilst allowing comparison and encouraging discussion and knowledge sharing.

The HEIs were each provided with login details for the scorecard and given the opportunity to select optional indicators, set scores for non-EMR indicators and set targets for all selected indicators.

The aim of this report is to evaluate participation, analyse the results inputted and provide a summary of any trends that have been identified.

#### 2 Glossary of Terms

Throughout this report, the following abbreviations and terms will the referred to:

#### **Sustainability Categories**

The scorecard contains eight categories outlining sustainability issues relevant to the estates team within a HEI. These are:



#### **Core Indicators**

There are 27 core indicators across the eight categories that those completing the scorecard must include. The core indicators are those that are considered to be applicable to all institutions and are a combination of both EMR (16) and non-EMR indicators (11).

#### **Optional Indicators**

There are 24 optional indicators across the eight categories that HEIs can select whether or not they choose to complete. The optional indicators are a combination of both EMR (6) and non-EMR indicators (18). These optional indicators are those that are considered to have a variable degree of applicability to institutions depending on certain characteristics such as location, size or degree of research focus.

#### **EMR Indicators**

There are 22 indicators, 16 of which are core, where the scores for each HEI are pre-populated based on the data collected from the Estates Management Record (EMR). Many of these indicators are expressed as an improvement from the average of the results from the previous three years.

The score a HEI achieves is based on the performance of the sector as a whole, with the score calculation in many instances based on quartiles, as shown below for an example where a reduction is required.

Zero points	indicator has increased
One point	indicator has decreased, level of change is within the lowest quartile
Two points	indicator has decreased, level of change is within the 2 <sup>nd</sup> quartile
Three points	indicator has decreased, level of change is within the 3 <sup>rd</sup> quartile

Targets for these indicators are still required to be inputted manually by the HEI.

#### **Non-EMR Indicators**

There are 29 indicators, 11 of which are core, where the HEIs are required to rate their current position and target qualitatively against a framework of statements. These statements are intended to have a degree of flexibility to allow institutions to determine how they best apply to their particular circumstances.

#### **Participating HEIs**

To get a more accurate representation of the data, only the HEIs who have actively participated in inputting scores and targets have been considered in all the analysis. A HEI must have set a least 10 scores or targets to be classed as actively participating (not including those prepopulated with the EMR data). The minimum of 10 is a way to eliminate any HEIs that have set a small number of scores when browsing the web portal but not committed to inputting definite scores or targets.

#### **Teaching HEIs**

Teaching HEIs are defined as those with over 80% of their income generated from teaching activities. 93 HEIs are identified as teaching focussed.

#### **Research HEIs**

Research HEIs are defined as those with over 20% of academic income generated by research. 65 HEIs are identified as research focused.

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#### 3 Participation

#### 3.1 Overall

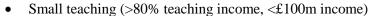
The number of HEIs that have actively set scores and targets provides an indication how engaged the sector is with participating in the scorecard.

Over 65% (101 in number) of all HEIs that have access to the web portal have actively participated in the scorecard.

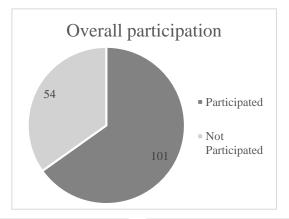
When this is split into teaching- and research-focussed HEIs it can be seen that research HEIs are much more engaged. 80% of research HEIs that have access to the web portal are actively participating compared with 64% of teaching HEIs.

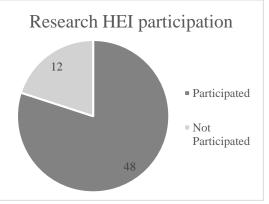
A similar difference in engagement is seen when institution size is taken into account. 85% of large HEIs have participated against 58% of small institutions.

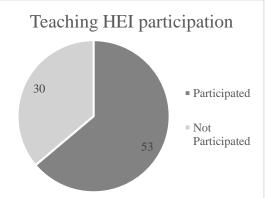
Note – definitions of institution type are as follows (provided by CBRE via AUDE):

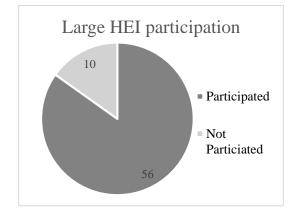


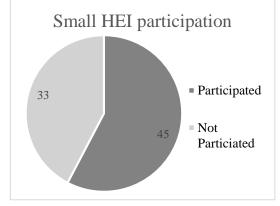
- Large teaching (>80% teaching income, >£100m income)
- Small Research (>20% research income, <£300m income)
- Large Research (>20% research income, >£300m income)











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#### 3.2 Indicator Groups

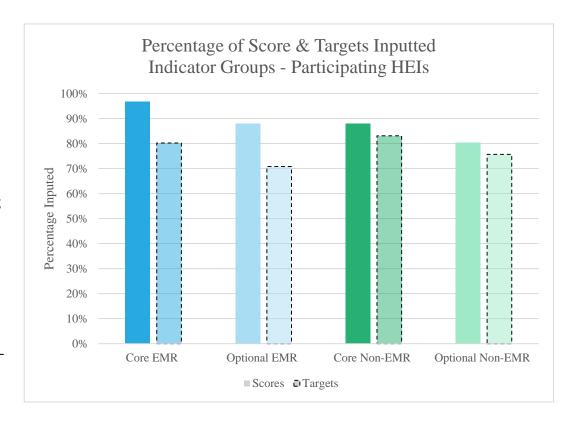
Across all indicators, 88% of scores have been inputted and 78% of targets have been set.

The bar chart shows the percentage of scores inputted and targets set for indicators within each group.

Unsurprisingly, the core EMR indicators have a much higher percentage of scores set than the core non-EMR indicators due to the scores being pre-populated. The figure for the core EMR indicators is just short of the 100% as not all HEIs have EMR data available for all indicators and some have not taken up the option of manually inputting a score where the EMR data is missing.

The core non-EMR indicators should be completed by all HEIs but require the HEI to manually input the scores. Almost 90% of the core non-EMR scores have been completed with 83% of the non-EMR targets completed. This shows that if the HEIs decides to input a score the vast majority are also setting themselves a target.

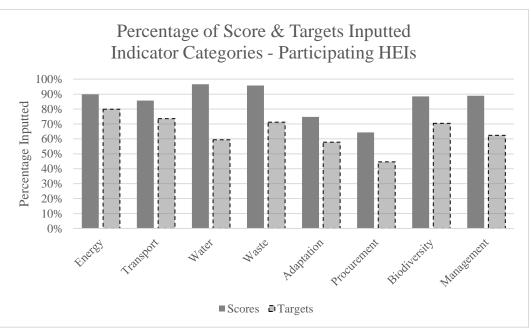
Whilst the core indicators are mandatory and the optional EMR are prepopulated, the optional non-EMR indicators have no such incentives to increase engagement. However, 80% of these indicators have been completed, showing that the vast majority of participating HEIs consider a significant proportion of the optional indicators to be relevant to their institution.

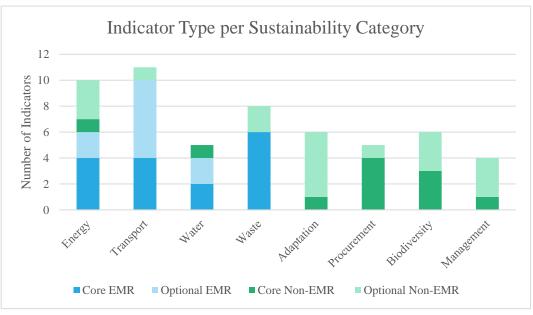


#### 3.3 Sustainability Categories

The graphs shows that the categories with a higher proportion of EMR indicators are, in general, more likely to have a score set than those categories with mainly non-EMR indicators. The four categories to the right of the graph (Adaptation, Procurement, Biodiversity and Management) have no EMR indicators and have a lower completion rate. However, the differences are not as significant as might have been expected.

There is less correlation between the proportion of core indicators with a category and the completion rate. This is highlighted by the comparison between Procurement (80% core, 64% take-up) and Adaptation (17% core, 75% take-up). This implies institutions might be choosing to make their own decisions on the indicators that are important to them, seeing the core/optional status as a guide.





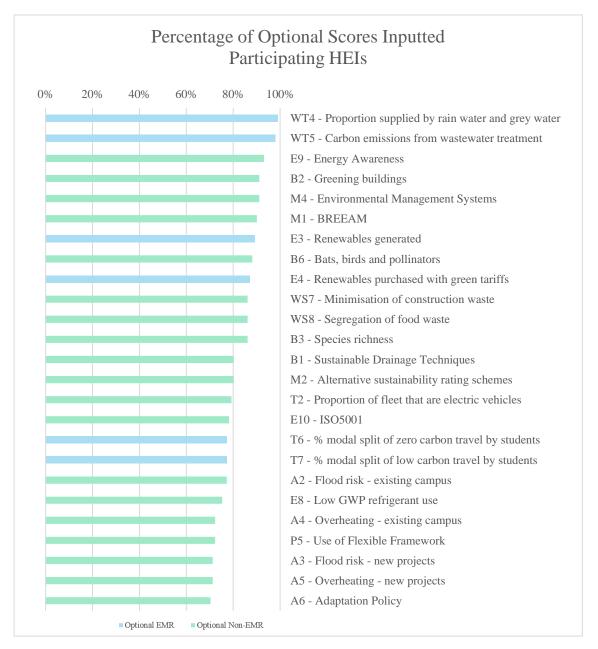
#### 3.4 **Optional Indicators**

The graph shows the percentage of HEIs that have chosen to score themselves against each of the optional indicators. The graph is ordered by highest to lowest so the most and least popular indicators can be identified.

Although Adaptation indicators generally have the lowest take-up, compared to the other optional indications, they have still been completed by at least 70% of participating HEIs. This seems to be more of an indication of how positive the HEIs view the value of these optional indicators.

Out of the optional non-EMR indicators, the Biodiversity and Management indicators are more popular than the Adaptation indicators. This could reflect the current degree of understanding of these issues and where the recent focus has been on improving these categories.

For the optional EMR indicators, there is a greater degree of uptake for the Water category than the Transport category. This could be an indication of the ease of the data collection or a reflection on the degree of influence that the Estates function has over the indicators. For example, the data regarding the proportion of water supplied by rainwater or grey water may be much easier to attain than the data regarding the modes of transport for students. Or alternatively, the Estates function may have more influence over the proportion of water supplied by rainwater or grey water then the modes of transport for students.



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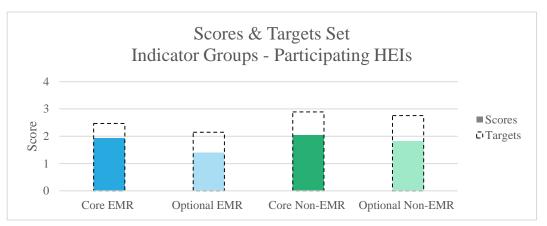
#### 4 Scores & Targets

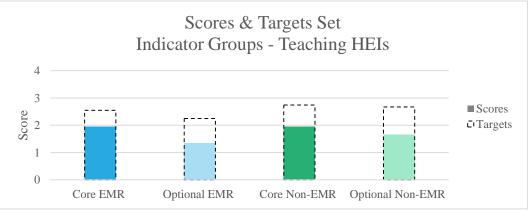
The values of the scores and targets set provide an indication of how well the sector as a whole is performing and what they are aiming to achieve over the next three years.

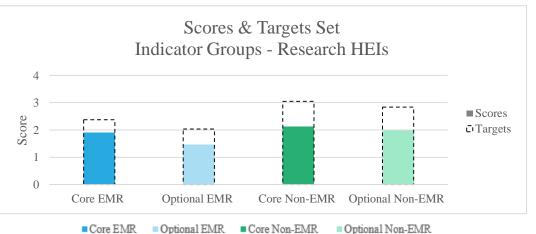
The average score set across all indicators is 1.9 and the average target is a 42% improvement on the score, coming in at 2.6. The average score and target set is very similar for teaching and research HEIs.

This result, particularly within the non-EMR indicators appears to show that the "difficulty" of the indicators has been set correctly. If they were too simple to achieve, institutions would all score highly and would find it difficult to set stretching targets within the framework.

Conversely, had the indicators been too difficult, the scores would have been concentrated at the lower end of the scale, with the transition between scores too great to allow progress to be rewarded and making the setting of appropriate targets problematic.







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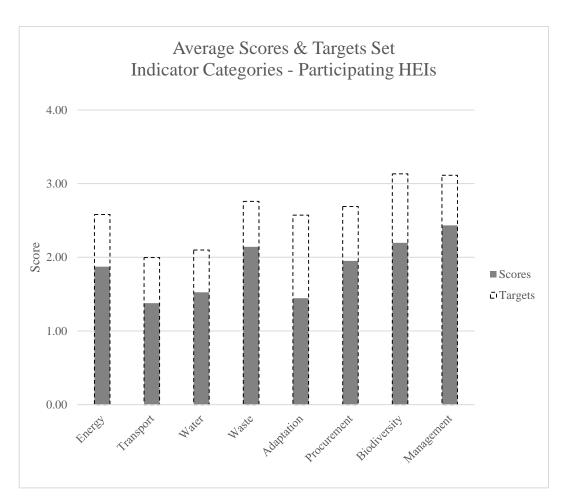
#### 4.1 Sustainability Categories

Biodiversity and Management are the two highest scoring categories, with the average score for the categories at 2.2 and 2.4 respectively.

Transport is the category with the lowest score and lowest target set, 1.4 and 2.0 respectively. As this category is dominated by EMR indicators, perhaps this indicates sector-wide difficulties in collecting robust data.

Adaptation is the category with the largest difference, 1.1, between the scores and the targets. Therefore, despite it being one of the lowest scoring categories, HEIs expect to perform well in this category over the next three years. Anecdotally, adaptation is the category universities have mentioned the most as not having had enough attention paid to it over the recent years.

The following sections examine each category in turn, showing the average scores for each category and pulling out the score distribution for an indicator of particular interest.

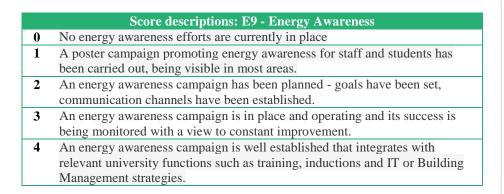


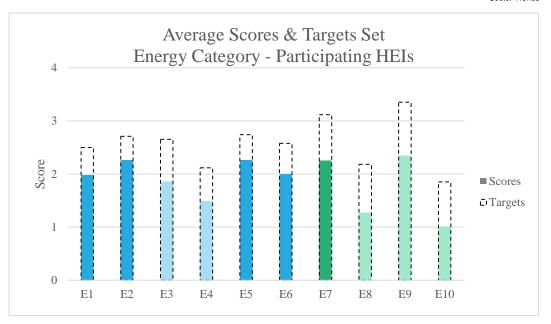
#### **4.1.1 Energy**

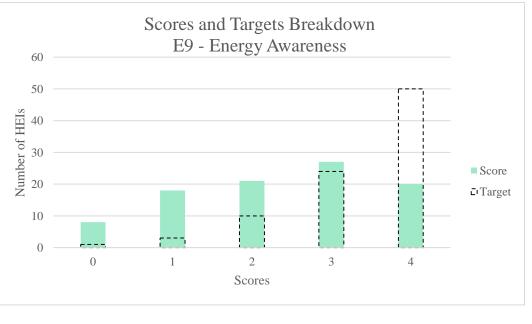
The top graph shows the average scores and targets set for each indicator within the Energy category. The majority of the indicators within this category have an average score of 2 and a target of between 2-3 set.

E9 "Energy Awareness" has the highest average score (2.4) and highest average target (3.4) within the category, with an impressive 94% of participation HEIs choosing to assess themselves against this optional non-EMR indicator. The lower graph shows the breakdown of scores and targets for E9.

The scores and targets set demonstrate that currently many of the HEIs have some form of energy awareness campaign but in the future they are aiming to create a well-established energy campaign that integrates with the relevant university functions such as training, inductions and IT or Building Management strategies.







Optional Non-EMR

■ Core EMR ■ Optional EMR ■ Core Non-EMR

E10 "ISO50001" has both the lowest average score (1.0) and the lowest average target score (1.9) within the category. The results show that over half of the participating HEIs do not currently have an ISO50001 accreditation, many are looking to being to work towards compliance in the future, although there is a significant proportion whose target remain sat zero, indicating that there are some who do not believe the process provides value.

	Score descriptions: E10 - ISO50001								
0	ISO5001 not sought								
1									
2	Working towards compliance – planned within next two years								
3									
4	Current ISO50001								

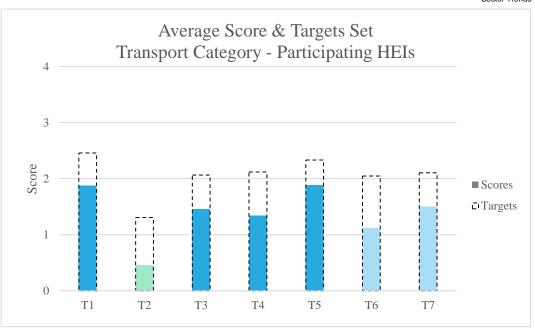


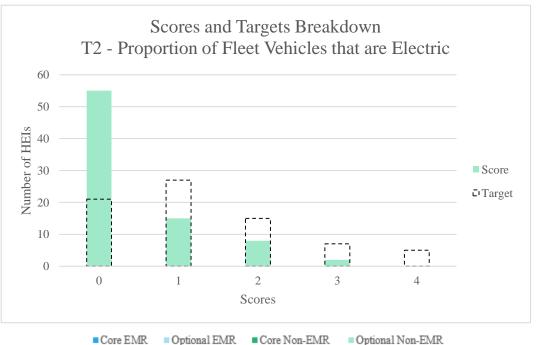
#### 4.1.2 Transport

The top graph shows the average scores and targets set for each indicator within the Transport category. The majority of the indicators within this category have an average score of between 1-2 and a target of 2 set.

T2 "Proportion of fleet that are electric vehicles" is the lowest performing indicator by a significant margin across all categories with an average score of just 0.5. The graph at the bottom of the page shows the breakdown of scores and targets for T2 and demonstrates that for the 78% of HEIs that have chosen to assess themselves against this indicator, the majority have less than 20% of vehicles in their fleet which are electrical. The average target for this indicator is 1.3, showing that the majority of those HEIs are aiming to increase the proportion of electric vehicles within their fleet over the next three years.

	Score descriptions: T2 - Proportion if fleet that are electric vehicles
0	0-19% of vehicles within the fleet are electrical
1	20-39% of vehicles within the fleet are electrical
2	40-59% of vehicles within the fleet are electrical
3	60-79% of vehicles within the fleet are electrical
4	80-100% of vehicles within the fleet are electrical





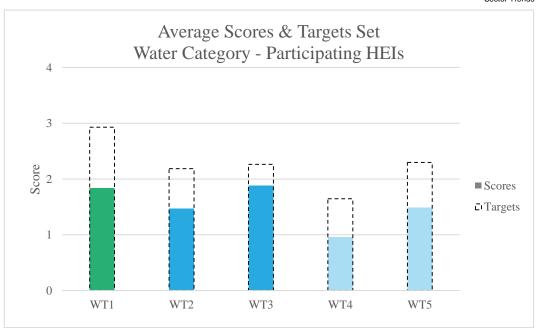
#### **4.1.3** Water

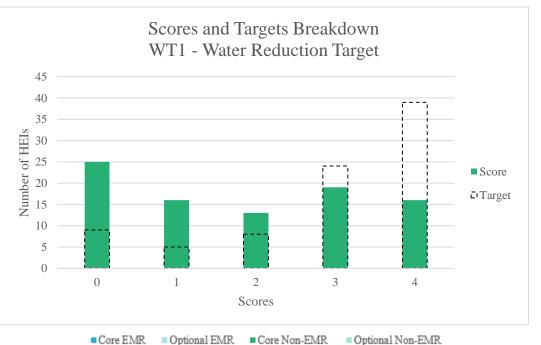
The top graph shows the average scores and targets set for each indicator within the Water category. The majority of the indicators within this category have an average score of between 1-2 and an average target of between 2-3.

WT1 "Water reduction target" is the highest targeting indicator within the category and also has the greatest difference between score and target. WT1 is a core non-EMR indicator meaning that all HEIs are expected to complete this indicator and set scores and targets manually.

The graph at the bottom of the page shows the breakdown of scores and targets for WT1. The results showed that this indicator was completed by 88% of participating HEIs and out of those HEIs the current scores that they set themselves were relatively evenly distributed across scores. In contrast to this, the targets that were set mainly fell within the 3-4 boundaries, demonstrating that the HEIs aimed to be on track to meet their water reduction targets within the next three years with many of these also aiming to meet the national water reduction targets (20% reduction by 2030 from ~2008 baseline).

	Score descriptions: WT1 - Water reduction targets
0	No quantifiable water reduction target has been set
1	Significant shortfall expected in water reduction targets with no agreed
	costed plan to make up the difference
2	Minor shortfall in expected with costed options being considered to close
	the gap
3	On track to meet target but target does not support national aims (20%
	reduction by 2030 from ~2008 baseline)
4	On track to meet target and target supports national aims (20% reduction
	by 2030 from ~2008 baseline)





#### **4.1.4** Waste

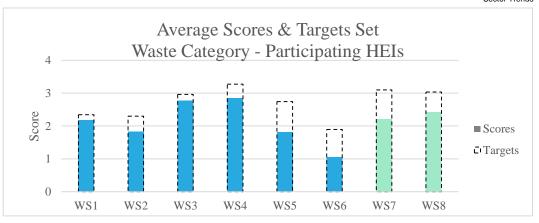
The top graph shows the average scores and targets set for each indicator within the Waste category. The majority of the indicators within this category have an average score of between 2-3 and an average target of almost 3.

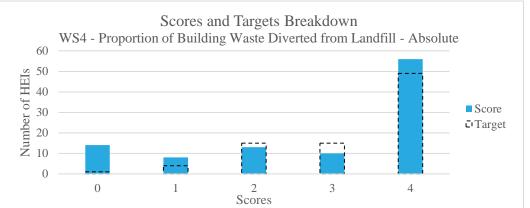
The scores for WS4 "Proportion of building waste diverted from landfill – absolute" have been completed by 100% of the participating HEIs. WS4 was also the highest scoring indicator across all categories with and average score of 2.9. The breakdown of the results show that 55% of participating HEIs have a current score of 4 showing that they divert over 95% of operational waste from landfill.

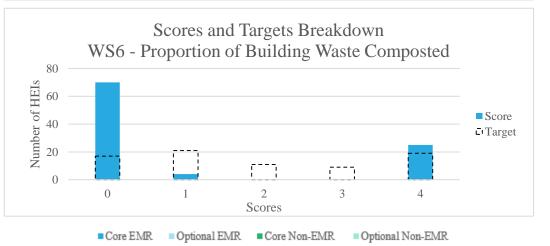
Score	Score descriptions: WS4 - Proportion of buildings waste diverted from landfill - absolute									
0	Proportion diverted from landfill >60%									
1	Proportion diverted from landfill >70%									
2	Proportion diverted from landfill >80%									
3	Proportion diverted from landfill >90%									
4	Proportion diverted from landfill >95%									

The results for WS6 "Proportion of building waste composted" show that for 71% of HEIs the proportion of waste composted has not increased compared to the previous three years. Few institutions seems to have set a target for this indicator, perhaps indicating that it is a particularly difficult issue to address.

	Score descriptions: WS6 - Proportion of buildings waste composted
0	Proportion of waste composted has reduced
1	Level has increased but reduction is in the lower quartile of the sector
2	Increase is in the second quartile
3	Increase is in the third quartile
4	Increase is in the top quartile



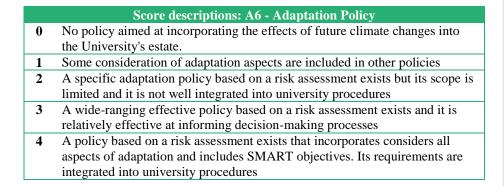


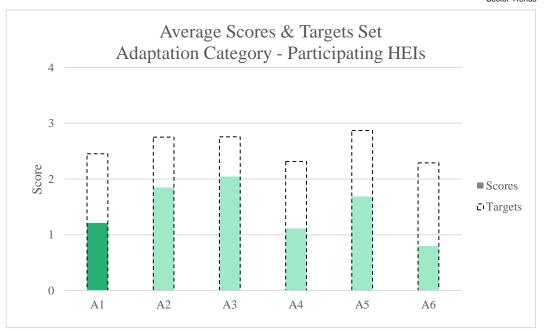


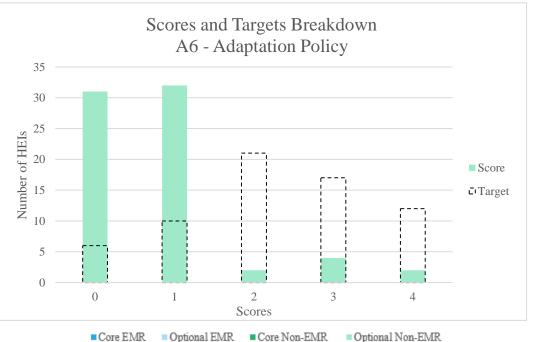
#### 4.1.5 Adaptation

The top graph shows the average scores and targets set for each indicator within the Adaptation category. The majority of the indicators within this category have a low average score of between 1-2 and an average target of between 2-3.

A6 "Adaptation Policy" has the most ambitious target when compared to all indicators but is also the least popular of all the optional indicators. The average score for A6 "Adaptation Policy" is 0.8 and the average target is 2.3. The large difference between the score and target demonstrates that the majority of HEIs currently have little or no policies that incorporate the effects of climate change but are looking to incorporate climate change adaptation policies in the future using these to inform decision making.



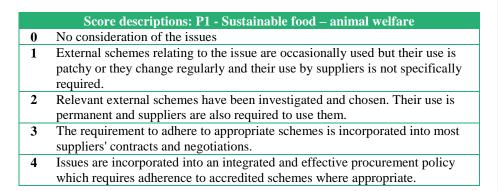


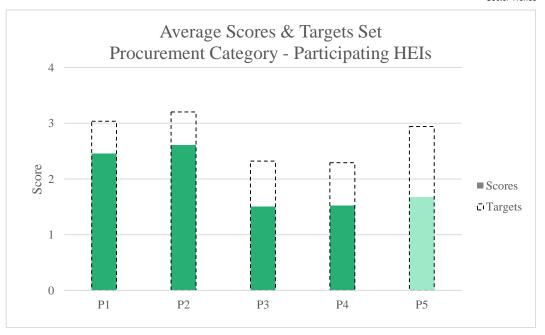


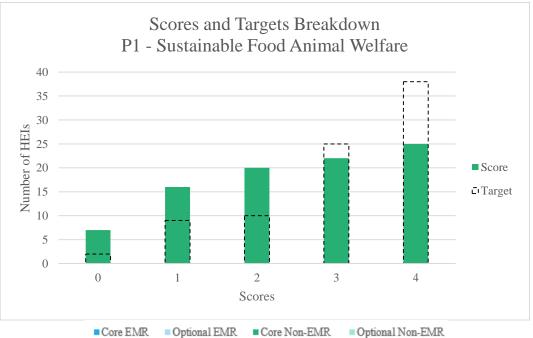
#### 4.1.6 Procurement

The top graph shows the average scores and targets set for each indicator within the Procurement category. The majority of the indicators within this category have an average score of around 2 and an average target of between 2-3.

The P1 "Sustainable food – animal welfare" indicator examines the degree to which animal welfare schemes in food procurement are used and supported in relation to food procured by the Estates Function. The breakdown for this indicator shows that there is a gradual increase in HEIs with improved animal welfare schemes. Nearly half of participating HEIs are targeting to incorporate animal welfare issues into an integrated and effective procurement policy which requires adherence to accredited schemes where appropriate.





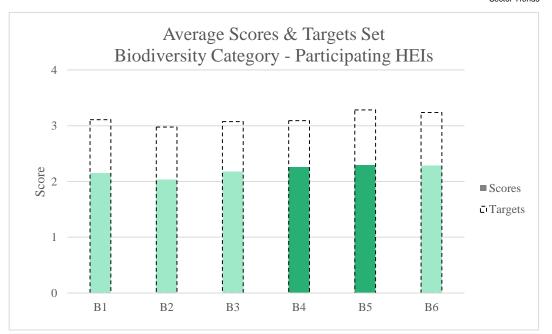


#### 4.1.7 Biodiversity

The top graph shows the average scores and targets set for each indicator within the Biodiversity category. Biodiversity is by far the most stable category in terms of the scores and targets set and overall has the highest average target compared to the other categories. The indicators within this category have an average score of over 2 and an average target of over 3.

B2 "Greening Buildings" has an average score of 2.0 and an average target of 3.0. This optional non-EMR indicator was completed by over 90% of participating HEIs. The majority of HEIs currently score themselves between 1-3 points indicating that the use of green/ brown roofs and green facades are encouraged in many projects if costs allow or a benefit exists. Over 40% of participating HEIs have targeted a score of 4, demonstrating that many HEIs aim for building integrated biodiversity to be included in the brief for all relevant building projects in response to a campus-wide policy.

# Score descriptions: B2 - Greening buildings It is policy or practice to not pursue opportunities for these aspects of biodiversity on buildings These aspects of biodiversity is occasionally incorporated into buildings if costs and other compromises are minimal. Usually design team led. Design teams are encouraged to consider potential solutions but little coordination exists between projects Significant habitats are included on almost all appropriate building projects where a benefit exists. Inclusion of building integrated biodiversity is included in the brief for all relevant building projects in response to a campus-wide policy. Issues such as maintenance are well understood.





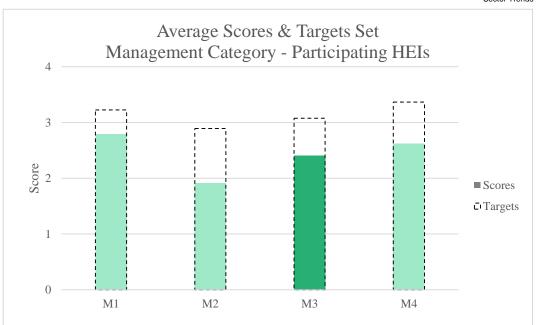
#### 4.1.8 Management

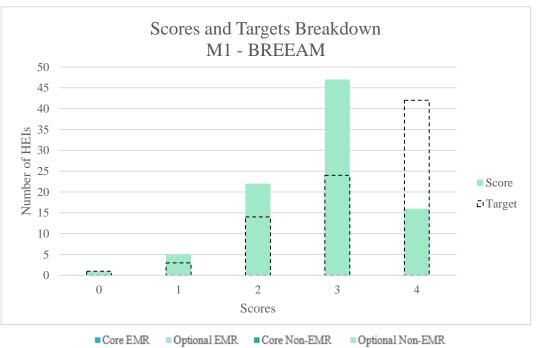
The top graph shows the average scores and targets set for each indicator within the Management category. Management is the highest scoring category compared to the other categories. The indicators within this category have an average score of 2.4 and an average target of 3.1.

M1"BREEAM" has the highest average score across all indicators, with the score coming out at 2.8. This indicator was completed by 90% of participating HEIs and the breakdown shows that the majority of those HEIs are required to achieve a BREEAM "Excellent" rating on new buildings (lesser standard for refurbishments) but indicate little responsibility taken for how it integrates into wider sustainability policies. The target scores for this indicator increase in steps with almost half of the HEIs targeting a score of 4, demonstrating that the is aim to achieve a minimum score of "Excellent" in the future and that the BREEAM process will be used the help the HEIs focus on their priority areas of sustainability. This potentially demonstrates that BREEAM is maturing from a tick-box exercise to a tool being used to influence the real-world sustainability of university buildings.



- **0** BREEAM is not considered and no suitable alternative is implemented. When required by planning regulations, steps are taken to remove the condition.
- 1 BREEAM 'Very Good' occasionally required.
- 2 BREEAM 'Very Good; required on all new buildings.
- 3 BREEAM 'Excellent' required on new buildings (lesser standard for refurbs) but little responsibility taken by University for how it integrates into wider sustainability policies
- 4 At least 'Excellent' achieved on all major projects and the BREEAM process to is used with vision to focus on university priority areas of sustainability





#### 5 Conclusion

The proportion of universities actively engaging in the Green Scorecard is significant. This is even more impressive when considering that it is in its first year – showing that the need for it within the sector was real and that AUDE were justified in responding to the messages of their members.

Overall, an average score of 1.9 is seen across all indicators. This highlights that significant progress has been made from the baselines set by the indicators. However, there is still progress possible in all categories towards higher scores. In considering this it should be remembered that higher scores are, in general, not set at a utopian ideal but at a pragmatic level that should be achievable by many institutions.

Looking into greater detail, the results show some interesting trends, although it should be noted that scores have not been rigorously benchmarked between categories (i.e. there is nothing to say that scoring a 2 overall in adaptation is the same level of difficulty or has the same value/importance as scoring 2 in procurement).

The management category is the highest scoring, indicating that institutions have in place systems to implement and monitor sustainability within Estates functions. However, these do still seem to rely heavily on BREEAM.

Biodiversity also scores highly although examining the score descriptions with the methodology shows that the majority of institutions still seem to lack a coherent approach in this topic.

At the other end of the scale, climate change adaptation is clearly an important issue that the sector does not feel it is addressing adequately

at the moment. It scores very low but has the highest stretch to its target level.

Transport also scores at a similarly low level but, conversely, also has the lowest target level, perhaps indicating difficulties in data collection or the ability of Estates functions to influence behaviour in this area.

Anecdotally, through the process of gathering information for case studies, we have also received feedback that the structure of the scorecard has provided a useful framework for universities to consider sustainability within. In addition, the visual nature of the output diagram has encouraged discussion and debate into the detail behind the headline scores.

A number of improvements have been suggested going forwards but very few of these have been mentioned by more than one university, indicating that there are no major problems with the methodology or the web portal.

This analysis, along with comments received, provides a good understanding of the sector's view of various aspects of the scorecard, giving the ability to improve the scorecard whilst keeping changes to a minimum in order to increase the stability of the methodology.

#### Appendix A

Green Scorecard scoring methodology

# Energy & Emissions

ID	Issue Name	Description	Optional?	Data Type	References for EMR data	0	1	2	3	4	Clarifications
E1	Change in building energy consumption - absolute	Improvement in total building energy consumption.	Core	EMR	Percentage reduction in EECTOT from average of previous three years	Energy consumption has increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	
E2	Change in building energy consumption - normalised by floor area	Improvement in building energy efficiency defined by energy consumption divided by net floor area.	Core	EMR	Percentage improvement in EECTOT/Total NIA (SMNIAT) from average of previous three years	Normalised energy consumption has increased.	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile		Reduction is in the top quartile	
E3	Renewables generated	Improvement in total energy generated on-site or off-site by renewables.	e Optional	EMR	Percentage improvement in EREGONF from average of previous three years	Percentage of energy from renewables has reduced	Level has increased but reduction is in the lower quartile of the sector	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	
E4	Renewables purchased with green tariffs	Percentage of renewable energy purchased through green tariffs	Optional	EMR	Percentage improvement in EPREPGTT from average of previous three years	No renewables purchased	Some renewables purchased through green tariffs but amount is in the lower quartile of the sector	Level is within the second quartile	Level is within the third quartile	Level is within the top quartile	
E5	Change in total scope 1&2 emissions	Improvement in total carbon emissions (scope 1&2).	Core	EMR	Percentage reduction in E12CET from average of previous three years	Emissions have increased	reduction is in the lower	Reduction is in the second quartile		Reduction is in the top quartile	
E6	Reduction from 2005 baseline	Percentage change in emissions from 2005 baseline.	Core	EMR	Percentage reduction in E12CET from E12E2005	Emissions have increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile		Reduction is in the top quartile	2005 is the standard baseline year for the sector but it is recognised that it is not ideal for all. However, for the sake of consistency, a 2005 baseline must be estimated if one does not exist.
E7	Carbon reduction targets	Appraisal of likelihood of meeting scope 1&2 carbon reduction targets	Core	Input		No quantifiable carbon target has been set or target has been set but a significant (>40%) shortfall expected in carbon targets with no agreed costed plan to make up the difference	expected in carbon targets with no agreed costed plan	Minor (<15%) shortfall in expected with costed options being considered to close the gap	On track to meet target but target does not support national sector aims	On track to meet target and target supports national sector aims	National target for the sector England is 43% reduction by 2020 from a 2005 baseline In devolved administrations no sector targets exist so national government targets should be used.
E8	Low GWP refrigerant use	Specification and use of low GWP refrigerants in new buildings and refurbishments (systems only containing a small amount of refrigerant - such as ~5kg - should be ignored)	Optional	Input		No consideration of GWP in building projects	Low GWP (<2000) refrigerants specified on new build projects	Low GWP (<2000) refrigerants specified on all new build and refurbishment projects	existing buildings. Ultra-low	Only ultra-low (GWP<150) refrigerants used throughout campus	
<b>E</b> 9	Energy Awareness	Appraisal of degree of energy awareness amongst staff and students	Optional	Input		No energy awareness efforts are currently in place	awareness for staff and students has been carried	An energy awareness campaign has been planned - goals have been set, communication channels have been established	campaign is in place and operating and its success is being monitored with a view to constant improvement.	An energy awareness campaign is well established that integrates with relevant university functions such as training, inductions and IT or Building Management strategies.	
E10	ISO5001	ISO50001 accreditation	Optional	Input		ISO50001 not sought		Working towards compliance - planned within next two years.		Current ISO5001 certification	





## Transport

ID	Issue Name	Description	Optional?	Datatype	References for EMR data	0	1	2	3	4	Comments
T1	Emissions from fuel used in HEI owned vehicles	Reduction in fuel emissions from HEI own vehicles	Core	EMR	Percentage improvement in EFUVTOT from average of last three years	Emissions have increased	reduction is in the lower	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	
Т2	Proportion of fleet that are electric vehicles	What proportion of university owned fleet controlled by the Estates Function are electric vehicles? If there is a large variation in the distances covered by vehicle of different types, this should be considered within the subjective response.	Optional	Input		0-19% of vehicles within the fleet are electric	20-39% of vehicles within the fleet are electric	40-59% of vehicles within the fleet are electric	60-79% of vehicles within the fleet are electric	80-100% of vehicles within the fleet are electric	Vehicles that are purely electric or are plug- in hybrids should be included. There is no specific definition of the vehicle type but the electric vehicle should directly replace a conventional one, be road legal and have the primary use of transporting people or items between university buildings.
Т3	Percentage modal split of zero carbon travel by staff	Improvement in percentage of zero carbon travel for staff	Core	EMR	Improvement in EMSFCCY+EMSFCWK from average of last three years	Percentage has reduced	reduction is in the lower	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Т4	Percentage modal split of low carbon travel by staff - improvement	Improvement in percentage of low carbon travel for staff	f Core	EMR	Improvement in EMSFCSCS+EMSFCSB+EMSFCT R+EMSFCCY+EMSFCWK from average of last three years	Percentage has reduced	reduction is in the lower	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
T5	Percentage modal split of low carbon travel by staff - absolute	Absolute level of low carbon travel for staff	Core	EMR	Absolute levels of EMSFCSCS+EMSFCSB+EMSFCT R+EMSFCCY+EMSFCWK	When compared to baseline dataset, the current year's consumption is in the lowest 20%	dataset, the current year's consumption is in the	When compared to baseline dataset, the current year's consumption is in the middle 20%	When compared to baseline dataset, the current year's consumption is in the second-highest 20%	When compared to baseline dataset, the current year's consumption is in the Highest 20%	
Т6	Percentage modal split of zero carbon travel by students	Improvement in percentage of zero carbon travel for students	Optional	EMR	Improvement in EMSTCCY+EMSTCWK from average of last three years	Percentage has reduced	reduction is in the lower	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Т7	Percentage modal split of low carbon travel by students	Improvement in percentage of low carbon travel for students	Optional	EMR	Improvement in EMSTCSCS+EMSTCSB+EMSTCT R+EMSTCCY+EMSTCWK from average of last three years	Percentage has reduced	reduction is in the lower	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.





### Water

ID	Issue Name	Description	Optional?	Datatype	References for EMR data	0	1	2	3	4	Clarifications
Wt1	Water reduction targets	Appraisal of likelihood of meeting water reduction targets	Core	Input		No quantifiable water reduction target has been set	Significant shortfall expected in water reduction targets with no agreed costed plan to make up the difference	Minor shortfall in expected with costed options being considered to close the gap	national aims (20%	On track to meet target and target supports national aims (20% reduction by 2030 from ~2008 baseline)	National Aims from Government Future Water Strategy
Wt2	Water consumption - improvement	Improvement in total water consumption	Core	EMR	Percentage improvement in EWCONTOT from last year	Water consumption has increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	
Wt3	Water consumption - absolute	Total absolute water consumption normalised by floor area	Core	EMR	EWCONTOT/Total NIA (SMNIAT)	When compared to baseline dataset, the current year's consumption is in the lowest 20%	When compared to baseline dataset, the current year's consumption is in the second-lowest 20%	When compared to baseline dataset, the current year's consumption is in the middle 20%	When compared to baseline dataset, the current year's consumption is in the second-highest 20%	When compared to baseline dataset, the current year's consumption is in the Highest 20%	
Wt4	Proportion supplied by rain water and grey water	Improvement in proportion of water supplied by rain water and greywater compared to the total water consumption	Optional	EMR	Improvement in (EWSGWRWT/EWCONTOT) from last year	Percentage of water reused has reduced	Level has increased but reduction is in the lower quartile of the sector	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Wt5	Carbon emissions from wastewater treatment	Improvement in total scope 3 carbon emissions from wastewater treatment.	Optional	EMR	Percentage improvement in E3CEWWTT from last year	Emissions have increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	





### Waste

ID	Issue Name	Description	Optional?	Datatype	References for EMR data	0	1	2	3	4	Clarifications
Ws1	Total waste generate	Improvement in amount of waste generated including construction projects	Core	EMR	Percentage improvement in EWMT from last year	Total waste generated has increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	
Ws2	Operational waste	Improvement in operational waste from buildings.	Core	EMR	Percentage improvement in (ENRWMT+ERWMT) from last year	Operational waste generated has increased	Level has decreased but reduction is in the lower quartile of the sector	Reduction is in the second quartile	Reduction is in the third quartile	Reduction is in the top quartile	To focus on operational waste generated
Ws3	Proportion of buildings waste diverted from landfill - improvement	Improvement in proportion of operational waste diverted from landfill	Core	EMR	Improvement in 1- [(ENRWMLAN+ERWMLAN)/(E NRWMT+ERWMT)] from last year	Proportion of waste diverted from landfill has reduced	Level has increased but reduction is in the lower quartile of the sector	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Ws4	Proportion of buildings waste diverted from landfill - absolute	Proportion of operational waste diverted from landfill	Core	EMR	Absolute level of 1- [(ENRWMLAN+ERWMLAN)/(E NRWMT+ERWMT)]	Proportion diverted from landfill >60%	Proportion diverted from landfill >70%	Proportion diverted from landfill >80%	Proportion diverted from landfill >90%	Proportion diverted from landfill >95%	
Ws5	Proportion of buildings waste recycled	Improvement in proportion of operational waste recycled	Core	EMR	Improvement in [(ENRWMREC+ERWMREC) / (ENRWMT+ERWMT)] from last year	Proportion of waste recycled has reduced or stayed level	Level has increased but reduction is in the lower quartile of the sector	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Ws6	Proportion of buildings waste composted	Improvement in proportion of operational waste composted	Core	EMR	Improvement in [(ENRWMCOM+ERWMCOM) / (ENRWMT+ERWMT)] from last year	Proportion of waste composted has reduced or stayed level	Level has increased but reduction is in the lower quartile of the sector	Increase is in the second quartile	Increase is in the third quartile	Increase is in the top quartile	A slight calculation change has been incorporated. The change from the average is now expressed as a percentage point increase/decrease (i.e. the difference in the figures) rather than a percentage increase.
Ws7	Minimisation of construction waste	Incorporation of waste minimisation techniques into construction projects	Optional	Input		No intention to develop a policy relating to construction waste in the near future	No existing policy for reduction of construction waste and targets not set for contractor but development is imminent	Construction waste not considered during the design phase of projects but targets set for contractor	Design teams required to adhere to the principles of WRAP guidance without formal submissions	WRAP guidelines for designing out waste formally implemented on all construction projects.	
Ws8	Segregation of food waste	An appraisal of how well the issue of segregating food waste is incorporated into university policies and practices.	Optional	Input		No intention to develop a policy/strategy relating to segregation of food waste in the near future	No existing policy/strategy for segregation of waste bu development is imminent	Food waste is collected from a limited number of buildings/facilities such as main cafeterias	The majority of food waste across the campus is segregated and collected including smaller bins.	A campus-wide strategy has been implemented for the segregation, collection and use of food waste	





# Adaptation

ID	Issue Name	Description	Optional?	Datatype	References for EMR data	0	1	2	3	4	Clarifications
<b>A1</b>	Climate change risk assessment	An appraisal of the use and maturity of a climate change risk assessment for a university's buildings and operations. This should be used to inform policy.	Core	Input	-	The risks of future climate change are not considered	There is a general awareness of potential future risks but no work has been done to understand the issues specifically affecting the institution	A high-level risk assessment has been carried out but the results have little impact on university operations	carried, the results	The risks of climate change with regard to the specific campus are fully understood and are well integrated into functional areas and future construction plans that might be affected.	
A2	Flood risk - existing campus	An appraisal of the degree of understanding of flood risk issues within existing buildings on campus	Optional	Input	-	Little or no understanding of potential flood risk above anecdotal historical events	with little focus	The risk of flooding in the current climate is well understood	The potential impact of climate change on likelihood of flooding has been modelled and is understood.	Future flooding issues are well understood and the issues inform works during the refurbishment cycles of existing buildings.	It is expected that only institutions with no areas at risk of flooding (now or in future climate scenarios) will choose not to assess themselves against this indicator.
А3	Flood risk - new projects	An appraisal of the degree to which new building project are informed by potential future flooding issues	S Optional	Input	-	Little attention to flood issues on new buildings over and above statutory minimum requirements	Some additional consideration of flooding issues such as design features to avoid water ingress for non-severe flood events.	Some consideration of secondary flood effects on surrounding landscape and utility supplies	All new buildings are fully protected for 1 in 100 events with an inclusion for climate change added	Flood modelling for 1 in 1000 (or similar) is carried out for new building design and mitigating measures are incorporated.	
Α4	Overheating - existing campu	An appraisal of the degree of understanding of overhearing issues within existing buildings on campus	Optional	Input	-	Little or no understanding of potential overheating risk above anecdotal historical events	Overheating has been considered as part of a business continuity plan but with little focus	The risk of overheating in the current climate is well understood	The potential impact of climate change on likelihood of overheating has been modelled and is understood.	Future overheating issues are well understood and the issues inform retrofit specifications and overarching estates strategy.	As well as incorporating design changes in refurbishment cycles, overheating can be combated by altering a building's use (for example to one with lower internal heat gains or less intensive usage)
<b>A</b> 5	Overheating - new projects	An appraisal of the degree to which new building project are informed by potential overheating issues	S Optional	Input	-	Little attention to overheating issues on new buildings over and above statutory minimum requirements	Qualitative consideration of potential future overheating issues	weather scenarios is carried	The building is designed to cope with temperatures expected during its first refurbishment cycle (~25yrs)	An overheating strategy is developed for all new buildings that shows how the building can be cope (with modifications) with the temperatures expected for its design life.	
А6	Adaptation Policy	Does the institution have a clear policy relating to the incorporation of climate change adaptation issues into it future development including soft and hard landscaping and operational issues? This should be based on an assessment of the risks		Input	-	No policy aimed at incorporating the effects of future climate changes into the University's estate.	Some consideration of adaptation aspects are included in other policies	A specific adaptation policy based on a risk assessment exists but its scope is limited and it is not well integrated into university procedures	policy based on a risk	includes SMART objectives.	It is expected that the adaptation policy will be appropriate to the size and complexity of a university's estate. It is not the intention of this indicator to encourage the development of policies that are not fit for purpose.





### Procurement

ID	Issue Name	<b>Description</b> Opti	tional?	Datatype	References for EMR data	0	1	2	3	4	Clarifications
P1	Sustainable food - animal welfare	Appraisal of the degree to which animal welfare schemes in food procurement are used and supported in relation to food directly procured by the Estates Function.	re	Input	-	No consideration of the issues	used but their use is patchy or they change regularly and their use by suppliers is	have been investigated and chosen. Their use is permanent and suppliers	to appropriate schemes is incorporated into most suppliers' contracts and negotiations	accredited schemes where appropriate.	This indicator is intended only to cover food procured by the Estates Function. Wider food procurement across the institution would need to be covered by a wider policy. There are no set schemes or number of schemes that must be met as relevance varies - universities are expected to appraise which schemes are appropriate to their estate.
P2	Sustainable food - human rights issues	Appraisal of the degree to which human rights issues in food procurement are used and supported in relation to food directly procured by the Estates Function (for example with the use of Fairtrade products).	re	Input	-	No consideration of the issues	External schemes relating to the issue are occasionally used but they change regularly and their use by suppliers is not required.	Relevant external schemes have been investigated and chosen. Their use is permanent and suppliers are also required to use them.	The requirement to adhere to appropriate schemes is incorporated into suppliers' contracts and negotiations.	Issues are incorporated into an integrated and effective procurement policy which requires adherence to accredited schemes where appropriate.	This indicator is intended only to cover food procured by the Estates Function. Wider food procurement across the institution would need to be covered by a wider policy.
Р3	Sustainable construction - local procurement	Appraisal of the degree to which the University uses its construction programme to benefit the local community with:  • High proportion of contractor spend with SMEs  • High proportion of contractor spend locally  • High proportion of employees from local area  • Swift payment terms to sub-contractors	re	Input	-	No consideration of the issues	achievement on these	incorporating these issues		of the construction	The appropriate definition of local may vary between institutions but Local Authority areas can be used as an initial starting point. For swift payment, the OGC Guide to best 'Fair Payment practices'.
P4	Sustainable construction - education and environment	Appraisal of the degree to which the University uses its construction programme to benefit the local community with:  • Reporting on environmental indicators  • Training and apprenticeship schemes  • Engagement with local schools	re	Input	- 1	No consideration of the issues	achievement on these	incorporating these issues			
P5	Use of Flexible Framework	Measurement against the Sustainable Procurement Flexible Framework produced by DEFRA	tional	Input	-	Flexible Framework not being used or no progress made	Flexible Framework achieved for each of the five	Flexible Framework achieved for each of the five	Flexible Framework achieved for each of the five	categories.	For the purposes of this scorecard, only Estates functions are required to be considered. However, these functions may be within a wider University-wide approach. If achievement levels are identified to vary across the University, those relating to Estates should be considered. Level 4 is set as the highest score as, despite not being the highest rating in the Framework, it still represents best practice. Institutions in devolved administrations that do not use the Flexible Framework are able to appraise their progress informally against the framework.





### Biodiversity & Landscape

ID	Issue Name	Description	Optional?	Datatype References for EMR data	0	1	2	3	4	Clarifications
В1	Sustainable Drainage Techniques	Degree to which sustainable drainage (such as SuDS) is implemented into existing campus and considered within works that affect hard and soft landscaping	Optional	Input	Little or no consideration of Sustainable Drainage Techniques	Sustainable Drainage Techniques are occasionally investigated but 'traditional solutions are almost always used	l' potential solutions but	Use of Sustainable Drainage Techniques is common and seen as the defaults solution.	The requirement to follow the Sustainable Drainage hierarchy (or similar) is included within the brief for all relevant construction projects.	
В2	Greening buildings	Use of green and brown roofs and green facades or other design features. These are primarily aimed at biodiversity improvements but can also be included to take advantage of one of the other benefits of such design features such as rainfall attenuation, reduced heat gain or the wellbeing aspects related to building-integrated biophilia.		Input	It is policy or practice to not pursue opportunities for these aspects of biodiversity on buildings	These aspects of biodiversity is occasionally incorporated into buildings if costs and other compromises are minimal. Usually design team led.	Design teams are encouraged to consider potential solutions but little coordination exists between projects	1	Inclusion of building integrated biodiversity is included in the brief for all relevant building projects in response to a campus-wide policy. Issues such as maintenance are well understood.	For campuses with large areas of open spaces, building integrated biodiversity may not always be the most appropriate approach. However, that does not mean to say that its benefits should not be considered and incorporated where appropriate.
В3	Species richness	Degree to which opportunities to increase the variety of native plant species are embraced, either in the existing campus, on construction projects or within landscape development.	Optional	Input	No significant consideration of these issues	Species-rich areas are occasionally incorporated into projects if costs and other compromises are minimal. Usually design team led.	Design teams are encouraged to consider potential solutions but little coordination exists between projects	,	Inclusion of species rich areas is included in the brief for all relevant projects in response to a campus-wide policy of maximising biodiversity across all areas of its estate.	
В4	Protection of ecological features and habitats	Degree to which existing ecological features and habitats are protected within any campus development works	Core	Input	Protection of ecological features is rarely considered over and above statutory requirements.	Features and habitats are protected where they do not compromise building design or campus masterplan. Removal or disturbance is relatively common.	There is an assumption that all ecological features and habitats will be protected. Removal or disturbance is rare.	Location of ecological features and habitats is considered in the development of the campumasterplan and in the setting of the brief for construction projects.	but the most extenuating	The definition of ecological features or habitats will vary depending on the local context. In general, they are considered valuable if they make a contribution to local species populations (either flora or fauna). The regular input of an ecologist would be expected to achieve higher scores.
В5	Biodiversity Action Plan	Existence of landscape management and development plan which specifically focusses on maximising the opportunities for biodiversity enhancement or the adoption of a formal Biodiversity Action Plan. Plans should not focus solely on buildings projects but should consider the wider campus as a whole.	Core	Input	Little or no specific consideration of biodiversity in landscape plan or no plan in place.	hut it does not torm a	Biodiversity is included within the landscape plan where areas are not needed for other purposes.	Increasing biodiversity is a driving factor in the landscape plan which is given comparable priority with creating amenity space and other requirements.	A Biodiversity Action Plan exists and is being progressed including identifying/surveying habitats, creating targets for improvement and identifying timelines and budgets.	This indicator should cover all university- owned properties and land. It is worth noting that urban institutions can still make a significant contribution despite the context of their setting.
В6	Bats, birds and pollinators	Degree to which habitats for bats, birds and pollinators are specifically protected, enhanced or created.	Optional	Input	It is policy or practice to not pursue opportunities for these aspects of biodiversity on buildings	These aspects of biodiversity is occasionally incorporated into buildings if costs and other compromises are minimal. Usually design team led.	Design teams are encouraged to consider potential solutions but little coordination exists between projects		Inclusion of habitats integrated biodiversity is included in the brief for all relevant building projects in response to a campus-wide policy.	





### Management

ID	Issue Name	<b>Description</b> O	Optional?	Datatype	References for EMR data	0	1	2	3	4	Comments
M1	BREEAM	Use of BREEAM as a mechanism for increasing the sustainability of new construction and major refurbishment projects. Given BREEAM is not considered by some to be the best way to drive sustainability into buildings, an alternative way of ensuring sustainable building design are permitted.	)ptional	Input		BREEAM is not considered and no suitable alternative is implemented. When required by planning regulations, steps are taken to remove the condition.	IRREFAIVI Very GOOD	BREEAM 'Very Good; required on all new buildings.	little responsibility taken by University for how it	on all major projects and	
M2	Alternative sustainability rating schemes	Use of alternative sustainability rating schemes in construction projects such as Living Building Challenge, WELL Building Standards, LEED, PassivHaus, RICS SKA, EnerPHit (although residential)	Optional	Input		No awareness of alternative schemes and their relative differences / advantages.	alternative schemes exists	Alternative schemes occasionally considered but seldomly implemented	Alternative schemes always considered and frequently implemented	considered on all major projects and always implemented or adopted in	The use of University-created bespoke sustainability frameworks is acceptable, provided they encompass a broad range of sustainability issues with suitably stretching targets and progress is constantly monitored and reported. The list of alternative schemes provided is not intended to be exhaustive.
М3	Management of sustainability on construction projects.	Degree to which the management of sustainability issues are prioritised within construction projects.	Core	Input		No consideration	Idesign team hut little	BREEAM Assessment only (or equivalent)	promoting, monitoring and	Client-side sustainability expert on each project tasked with driving the issue through the design process.	
M4	Environmental Management Systems	Use of formal EMS systems to ensure consistent, thorough approach to operational environmental issues	Optional	Input		No intention to pursue certification	Working towards certification. EcoCampus Bronze	Key elements of a system in place that does not cover all elements of sustainability impact.  EcoCampus Silver	scope or key elements in place covering all elements of sustainability impact.	Certification achieved for all elements of sustainability impact - ISO14001 or equivalent. EcoCampus Platinum	Flexibility in which EMS is used is included, recognising that some certification routes may not be appropriate to all. It is recognised that



