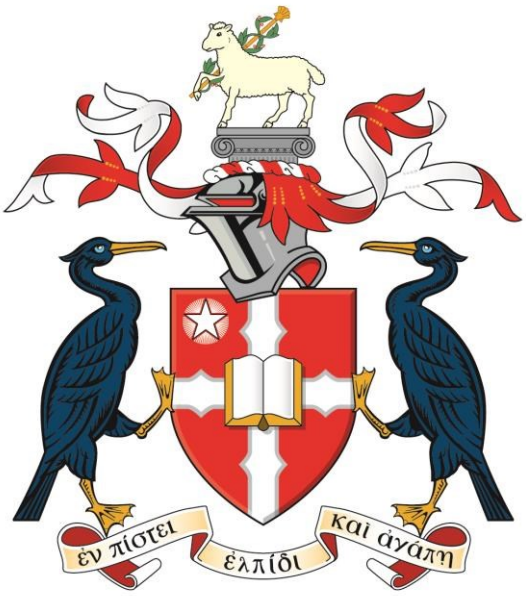


SUSTAINABILITY STRATEGY
2015-2016
Annual Report

Welcome

Liverpool Hope University is a unique institution, being the only ecumenical Christian University in Europe. As such, this University has a moral, ethical and social responsibility to consider, and be accountable for, the impacts of its activities on students, employees, suppliers, the local community and wider stakeholder groups, as well as on the environment. The University is committed to maintaining, and where possible, enhancing the quality of its environment for its staff and students working and living at the University and for the wider community.

The University's Sustainability Strategy 2015-2016 commits the University to the principles of sustainable development. There are ten main principles by which the University is seeking to improve its environmental sustainability: Corporate Governance and Leadership, Energy Management, Water Efficiency, Property Management and Construction, Information Technology, Recycling and Waste, Travel, Biodiversity and Green Space Management, Sustainable Procurement and Awareness and Education.

This annual report provides a summary of the activities, initiatives and projects undertaken by the University during the 2015-2016 academic year and comments on the objectives set out in the 2015-2016 Strategy, details our progress against our targets and the key performance indicators (KPIs), as well as our plans for the future. Please note that not all objectives and KPIs are discussed / data provided for within this annual report because either the data is not available at the time of writing or no progress against them has been made, which needs to be taken into consideration within the subsequent Sustainability Strategy.

Author: Suzanne Moody
Date: October 2016

1) CORPORATE GOVERNANCE AND LEADERSHIP

The University has a corporate responsibility to create an open, socially just, healthy, safe and secure environment. To ensure that the principles of the Sustainability Strategy are fulfilled, it must ensure that Sustainability is taken into account in its operation and decision making processes and this is an ongoing process and we are continually striving to improve.

The Sustainable Development Steering Group (SDSG) was established to plan, co-ordinate and monitor the delivery of the sustainability agenda. Progress against this strategy are monitored through the SDSG and reported to Senior Managers on a regular basis. These Senior Manager reports are presented to Finance and General Purposes for further consideration and then submitted to University Council for approval where appropriate.

Environmental sustainability continues to be incorporated into the University's operations, educational activities and research endeavours and promotes best practice at all levels.

Sustainability has not yet been included within all job descriptions and role specifications, but we are continuing to work with Personnel regarding this. Corporate Communications include sustainability in both internal and external marketing, recruitment and promotional literature, where appropriate.

The Environmental Legislation register is updated on a quarterly basis, following updates from the Environmental Association of Universities and Colleges; this list, however, is not exhaustive; and the University is kept up to date with legislation and regulations via its contractors such as B&M, our waste and recycling contractor.

KPIs:

Performance Indicator	**Metrics**	**Progress**
Progression towards EMS	Benchmark score	No progress
Plans and Policies developed, reviewed or renewed which consider sustainability	Number of Plans and Policies developed, reviewed or renewed	Carbon Management Plan, Sustainable Procurement Policy, Sustainable Catering Policy, and Travel Plan
Training sessions, Induction programmes	Number of awareness and training programmes delivered	Ongoing, training and awareness sessions were given as part of the Green Impact and Student Switch Off Campaigns and events were held throughout the year, including Reduce-Reuse-Recycle Event, Green Impact Week, Christmas Switch Off and Fairtrade Fortnight

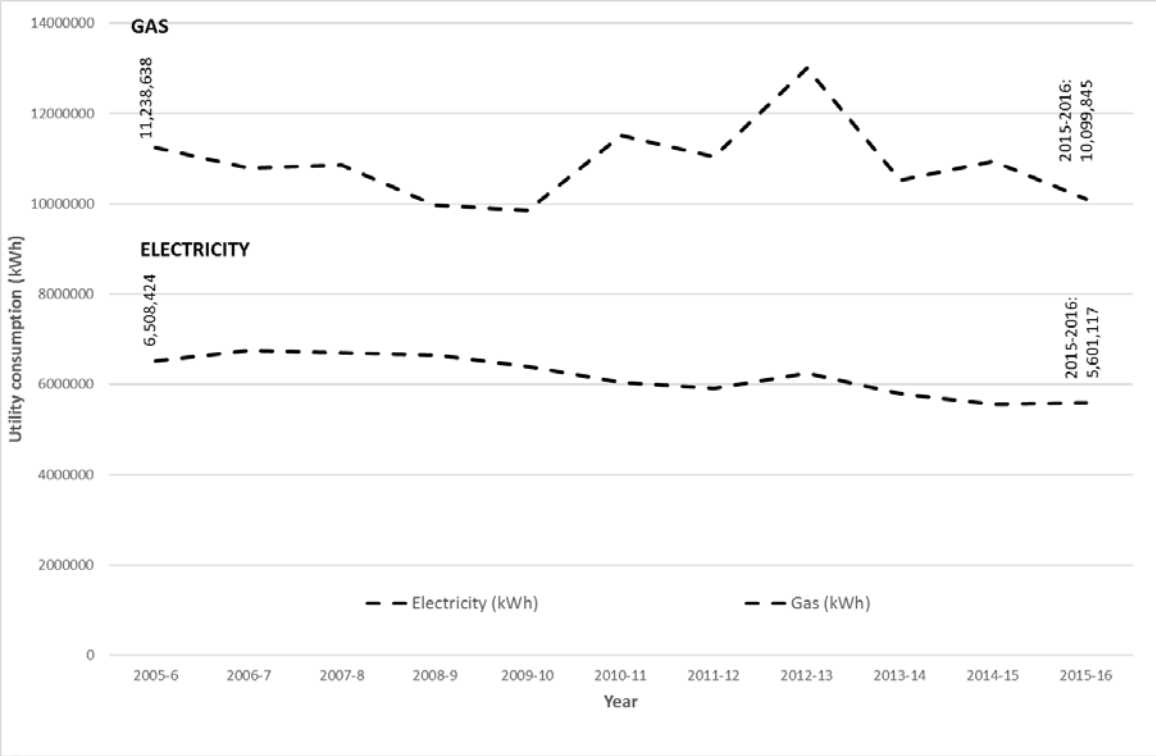
2) UTILITY MANAGEMENT

Utilities form a significant portion of the University's non-pay spend and contributed ~27% of the University's 2015-2016 carbon footprint.

Please note, the utilities reported here do not include those from the residential houses that the University owns and rents out; neither does it include the costs for Plas Caerdeon as it has a separate budget (however, its consumption is included).

Electricity and Gas

The University has reduced its consumption of electricity by 13.9% between 2005-2006 and 2015-2016 and reduced its gas consumption by 10% during the same period.



Electricity consumption has increased by 0.7% from last year with an associated cost increase of 2.9%; gas consumption has decreased by 7.8% since last year with an associated cost decrease of 14.3%. The costs are also affected by the prices achieved in the new contract (see below), which were lower than the previous contract.

The increasing electricity consumption has increased despite the completion of a number of carbon reduction projects including replacing lighting with LEDs, the installation of a new efficient dishwasher in the main FML kitchens and the installation of solar panels on the Health Sciences Building. Electricity is mainly user controlled i.e. lighting and electrical equipment and therefore staff and students need to engage with this agenda. Gas consumption (and costs) have decreased following the completion of a number of carbon reduction projects, including heating control modifications in the EDEN building and the completion of Thermostatic Radiator Valves in St Julies.

The new Health Sciences building (increasing the estate's gross internal area by 32844m^2) was completed and opened in January 2016 and this will have an impact on the utilities, though the impact cannot be fully quantified at present.

The consumption changes may also be affected by the weather, though this has not been explored as the targets set are absolute targets and are not dependent on factors such as the weather or the size of the estate.

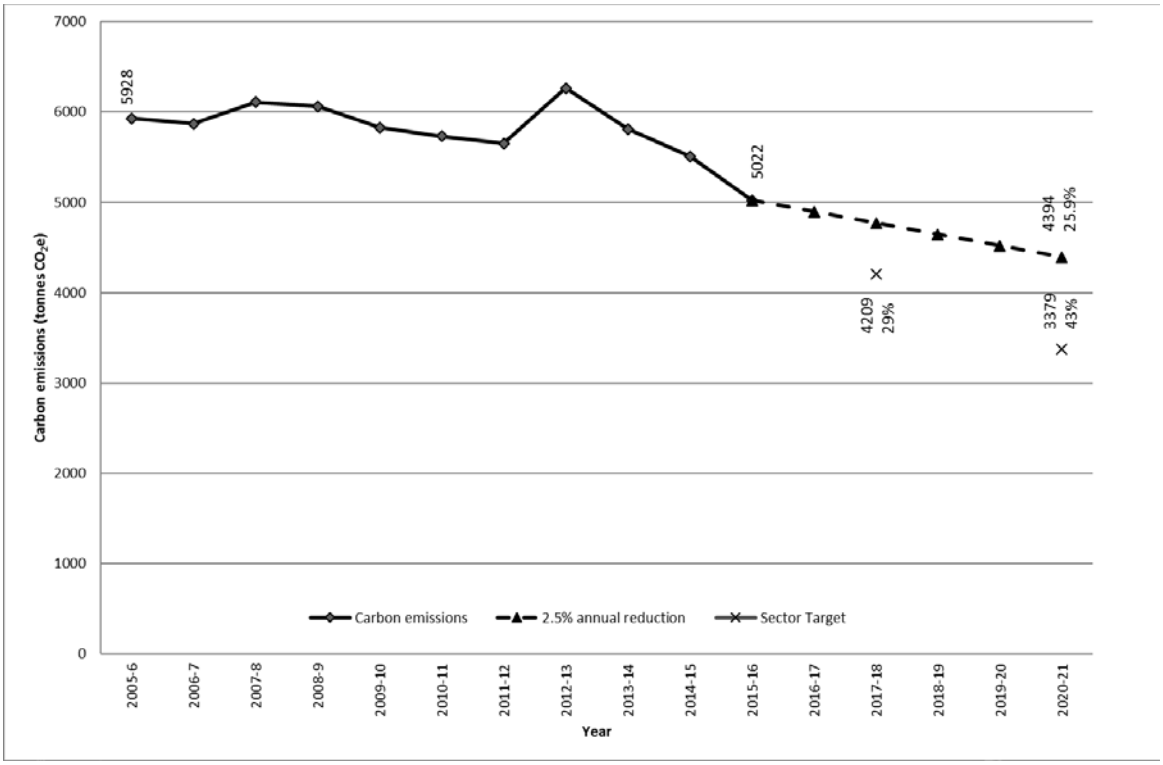
A Carbon Management Plan (CMP) has been drafted to detail the consumption / usage and associated emissions of Scope 1, Scope 2 and Scope 3 emissions across the University (gas, fugitive emissions, fuel used within University owned vehicles, electricity, water and sewerage, recycling and waste (including construction), supply chain, staff and student commuting, and business travel). Consumption targets have been drafted for electricity and gas, carbon reduction targets have been drafted for Scope 1 and 2 emissions and reductions are welcomed for Scope 3 emissions. The CMP identifies carbon reduction projects and

activities which are crucial for the University to meet its targets. The project list (see Appendix C in the Carbon Management Plan) is a fluid document and will be updated once projects are completed, and new projects are identified and, where possible, quantified.

Energy audits were completed by an external consultancy in July 2015 and these have informed the projects within the CMP. Although formal internal audits have not been carried out, regular inspections of the campus occur and any energy or water wastage is identified and reported. The Green Impact scheme has an audit for the teams to complete and Green Impact is also one of our main methods of advising teams on how to minimise their environmental impact through the completion of a series of quick and simple actions.

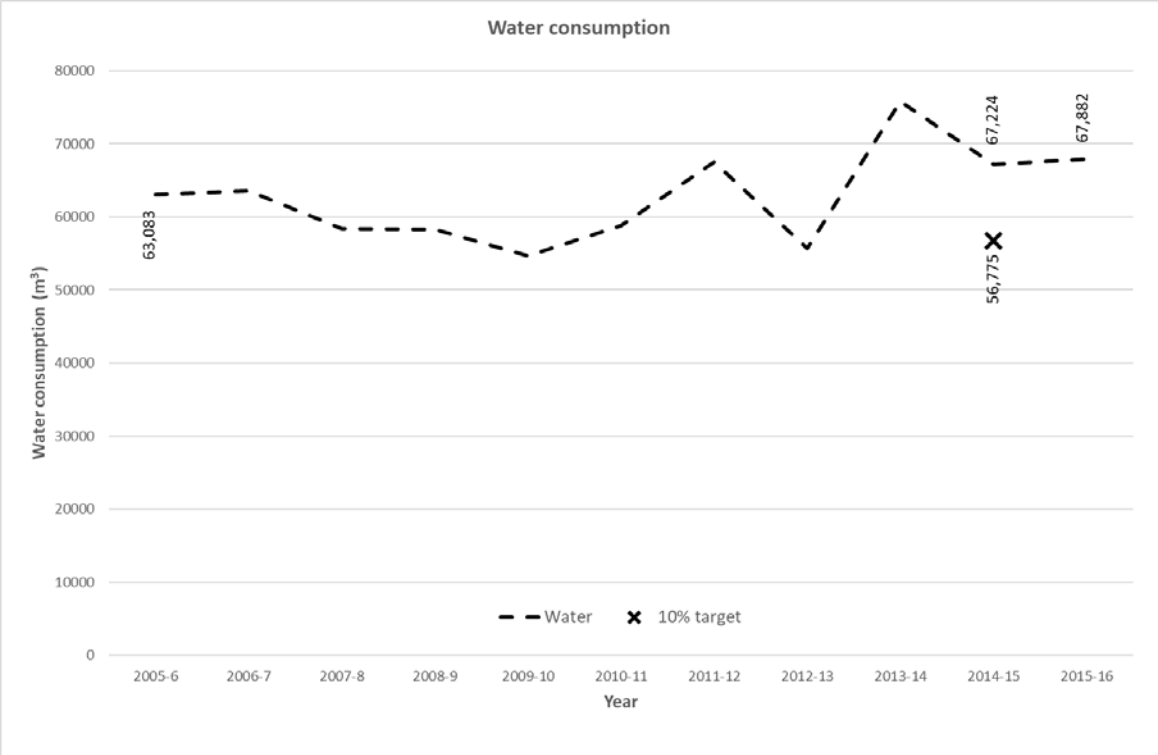
To ensure that space is used efficiently all evening and weekend teaching continues to be consolidated within the EDEN building to ensure that buildings are not open and heated unnecessarily. Room usage surveys continue throughout term-time to ensure that rooms booked / timetabled and being used and faculties / departments are fined if the room is vacant.

The University set a target of a 2.5% year-on-year carbon (Scope 1 and 2 emissions) reduction from its 2015-2016 position by 2020-2021. Scope 1 and 2 emissions include gas, fuel used within University owned vehicles and electricity; please note Scope 3 emissions have been included for completeness as they were not separately calculated prior to 2008-2009 so accurate comparison with previous emissions could not be made. The University has already reduced its Scope 1 and 2 carbon emissions by 15.2% and aims to reduce its emissions to 4394 tonnes CO_2e by the end of 2020-2021.



Water

Since the baseline year of 2005-200, although consumption has been variable there has been an overall increasing trend. At the end of 2014-2015 consumption had increased by 6.6%; failing to meet the 10% reduction target between 2005-2006 and 2014-2015. Consumption had risen again in 2015-2016 increasing 7.7% since 2005-2006.



Water consumption and sewerage in 2015-2016 has increased by 1% compared to last year with an associated cost increase of 6.4%. The main increase in cost has been the sewer, surface water and highway drainage part of the invoice, which has increased 13.2% since last year; it must be noted that a large portion of this is fixed charges and cannot be changed or influenced by the University.

Contracts

The University renewed its electricity and gas contracts in October 2015 using Briars Associates as the Third Party Intermediary. The contracts were procured via an OJEU framework on a fixed contract, where prices were fixed at a certain time and date, with added risk premiums to ensure that any potential increases in costs are covered and the supplier do not make a loss. The electricity contract has been fixed for three years and the gas contract fixed or four years to provide the best value.

KPIs:

Performance Indicator: Utility consumption and costs

	2012-2013	2013-2014	2014-2015	2015-2016
Electricity				
kWh / yr	6,239,181	5,794,749	5,564,494	5,601,117
£ / yr	745,439	721,493	692,854	713,019
KWh / Staff & Student FTE	1020	1098	1120	1126
kWh / m^2	81	76	73	71
Gas				
kWh / yr	12,998,185	10,520,528	10,948,360	10,099,845
£ / yr	447,470	378,123	397,347	340,626
KWh / FTE	2125	1849	2204	2031
kWh / m^2	169	137	13	128
Water and Sewer				
kWh / yr	55,659	75,734	67,224	67,882
£ / yr	199,453	265,934	230,588	245,338
KWh / FTE	9.1	13.3	13.5	13.7
kWh / m^2	0.73	0.99	0.88	0.86

Performance Indicator: Carbon emissions

	2012-2013	2013-2014	2014-2015	2015-2016
Electricity				
T CO_2e / yr	2757	2207	2291	2111
T CO_2e / Staff & Student FTE	0.45	0.39	0.46	0.42
Gas				
T CO_2e / yr	3493	3589	3199	2895
T CO_2e / Staff & Student FTE	0.57	0.63	0.64	0.58
Water and Sewer				
T CO_2e / yr	59	80	71	71
T CO_2e / Staff & Student FTE	0.01	0.01	0.01	0.01

3) PROPERTY MANAGEMENT AND CONSTRUCTION

All aspects of buildings (design, construction, operation, refurbishment and demolition) can have a significant impact on the environment. The University's draft Estates Strategy will incorporate sustainability and a Climate Adaption Plan has been written to ensure that climate change is considered within the Estates development; though a sustainable refurbishment guideline document has not yet been written.

KPIs:

<table>
<tr><th>Performance Indicator</th><th>Metrics</th><th>Progress</th></tr>
<tr><td>Building Display Energy Certificates</td><td>Rating compared to previous year</td><td>
<table>
<tr><th>Rating</th><th>2015-2016</th><th>2014-2015</th></tr>
<tr><td>A</td><td>2</td><td>2</td></tr>
<tr><td>B</td><td>7</td><td>5</td></tr>
<tr><td>C</td><td>6</td><td>6</td></tr>
<tr><td>D</td><td>7</td><td>10</td></tr>
<tr><td>E</td><td>0</td><td>0</td></tr>
<tr><td>F</td><td>0</td><td>0</td></tr>
<tr><td>G</td><td>0</td><td>0</td></tr>
</table>
Cornerstone, EDEN and HCA all increased their efficiency from a D rating to a C; and Hopkins and the Business School increased their rating from a C to a B. Sports is not included as it is currently being refurbished.
</td></tr>
<tr><td>Space Utilisation</td><td>% useable space</td><td>
<table>
<tr><th>Year</th><th>Teaching (not offices) occupancy rate (%)</th></tr>
<tr><td>2012-2013</td><td>68.2</td></tr>
<tr><td>2013-2014</td><td>57.9</td></tr>
<tr><td>2014-2015</td><td>58.4</td></tr>
<tr><td>2015-2016</td><td>51.6</td></tr>
</table>
</td></tr>
<tr><td>Room charges for non-use of bookable space</td><td>Cost of room charges/faculty/yr [1]</td><td>
<table>
<tr><th>Faculty</th><th>Space charges (£)</th></tr>
<tr><td>Arts & Humanities</td><td>3,548</td></tr>
<tr><td>Education</td><td>3,018</td></tr>
<tr><td>Science & Social Science</td><td>1,904</td></tr>
</table>
</td></tr>
</table>

[1] The room charges were based upon rooms inspections were carried out between the following dates: 26-29/1, 1-4/2, 9-12/2, 23-26/2, 1-4/3, 8-11/3, 15-18/3, 12-15/4, 19-22/4, and 25-29/4

Building condition and functional suitability	Rating compared to previous year	**Building Condition (%)**

	2015-2016	2014-2015
A – Residential	0	0
A – Non-Residential	9	15
B – Residential	95	95
B – Non-Residential	84	80
C – Residential	5	5
C – Non-Residential	6	4
D – Residential	0	0
D – Non-Residential	1	1
Functional Suitability		
1 – Residential	28	28
1 – Non-Residential	33	38
2 – Residential	38	38
2 – Non-Residential	62	59.5
3 – Residential	15	34
3 – Non-Residential	3	0.5
4 – Residential	19	0
4 – Non-Residential	2	2

4) INFORMATION TECHNOLOGY

The University continues to harness appropriate technologies and strategies to increase the efficiency of its existing equipment, including desktops, printers and servers and specifies more efficient new or replacement equipment through the procurement process. During 2015-2016 the efficiency of the air handling units in the library was improved and the University's multi-functional devices were replaced with more efficient models. At the end of its life IT equipment is disposed of via CDL (Computer Disposal Limited) who collect the equipment, separate them into hazardous and non-hazardous waste, and then further separate the items into non-data bearing and data bearing items; after the data has been destroyed, the items are then recycled.

5) RECYCLING AND WASTE

The principles of the waste hierarchy (prevent, reduce, reuse, recycle, recover) are considered throughout the University to reduce the amount of waste produced and to increase recycling rates.

Targets were set to reduce the general waste tonnage by 5% by 2014-2015; unfortunately in 2014-2015 we had actually increased the general waste tonnage by 14% against 2005-2006 levels and 8.9% in 2015-2016. It has to be noted since 2005-2006 the quantity and quality of data available has dramatically increased and improved, and the weights have changed from being an average weight per bin to an accurate weight per bin.

Our contract with B&M began in September 2013 and since then we have been progressively diverting the waste to refused derived fuel and away from landfill; however, in 2015-2016 we still sent 0.3 tonnes to landfill (one of the collection routes was still being diverted to landfill, but this has since been rectified).

We continue to promote recycling via posters in halls of residence and information on our website and at our events (B&M attended the Green Impact week in December to promote recycling and waste). Recycling and waste information was also included within the Moving In Guide for halls of residence, though it did not explicitly state which items could be recycled, this needs to be addressed in the 2016-2017 Moving In Guide.

There are a number of actions within Green Impact which promote which materials can go in which bin and the purchase of 'green' products.

During 2015-2016 the University recycled 25% through source segregation (plastics, cans, glass, paper, confidential paper, cardboard, batteries, and WEEE) compared to 22% in 2014-2015. There continues to be a major issue of recyclables being placed in the general waste; but this is hand-picked by our waste and recycling contractor and increases the recycling rate to 53% in 2015-2016 compared to 55% in 2014-2015. Contamination of the recycling stream is also an issue which must continue to be addressed.

KPIs:

<table>
<tr><th>Performance Indicator</th><th>Metrics</th><th>Progress</th></tr>
<tr><td>Waste produced</td><td>tonnes/yr
tonnes/yr/staff & student FTE</td><td>
<table>
<tr><th>Year</th><th>Tonnes / yr</th><th>Tonnes / Staff & Student FTE</th></tr>
<tr><td>2012-2013</td><td>209</td><td>0.03</td></tr>
<tr><td>2013-2014</td><td>325</td><td>0.06</td></tr>
<tr><td>2014-2015</td><td>350</td><td>0.07</td></tr>
<tr><td>2015-2016</td><td>335</td><td>0.07</td></tr>
</table>
2013-2014 saw a marked increase in the amount of general waste being generated and therefore the tonnage per FTE, this corresponded with a change in recycling and waste contractor and the reversion to average weights per bin (previously accurate).
</td></tr>
<tr><td>Waste to landfill</td><td>Tonnes/yr
Cost/yr</td><td>No progress. The landfill element of the waste is not separately invoiced.</td></tr>
<tr><td>Building waste</td><td>Tonnes/yr
% recycled</td><td>118 tonnes of building waste was recycled. Limited data has been received from the University's construction partners.</td></tr>
</table>

6) TRAVEL

The University will promote sustainable travel policies and procedures though realises that car use is required by some. Transport and parking continues to be a significant environmental and community (University and local) issues.

A travel survey was completed in April 2016 and the Travel Plan was published in June 2016. We will continue to explore the suggested actions. Specific car parking management plans have not yet been completed.

The carbon emissions for travel are calculated using a number of different sources – business travel is collated and calculated using the travel and subsistence claim forms submitted to payroll (though Finance are investigating an electronic travel claim form) and via the University's Travel Management Companies; and staff and student commuting is calculated using the travel survey. Data is not yet being collected for students commuting between their home and University term-time address; not visitors, contractors, deliveries or outsourced activities.

Sustainable travel choices are promoted via offering video conferencing, promotion of the University's shuttle bus and Cyclescheme and they form several actions within Green Impact.

KPIs:

<table>
<tr><th>Performance Indicator</th><th>Metrics</th><th>Progress</th></tr>
<tr><td>Travel Modes</td><td>% of travel by various modes</td><td>
<table>
<tr><th>Mode</th><th>Staff (%)</th><th>Student (%)</th></tr>
<tr><td>Car alone</td><td>51</td><td>17</td></tr>
<tr><td>Car Share</td><td>13</td><td>14</td></tr>
<tr><td>Bus</td><td>14</td><td>27</td></tr>
<tr><td>Shuttle Bus</td><td>1</td><td>11</td></tr>
<tr><td>Train</td><td>2</td><td>6</td></tr>
<tr><td>Walk</td><td>15</td><td>20</td></tr>
<tr><td>Bicycle</td><td>3</td><td>2</td></tr>
<tr><td>Taxi</td><td>1</td><td>1</td></tr>
<tr><td>Other</td><td>0</td><td>1</td></tr>
</table>
For detail on the Travel modes, how these compare to previous years, and the targets set please refer to the 2016 Travel Plan
</td></tr>
<tr><td>Uptake of the Cyclescheme initiative</td><td>Number of staff within the scheme</td><td>
<table>
<tr><th>Year</th><th>Cyclescheme Participants</th></tr>
<tr><td>2012-2013</td><td>10</td></tr>
<tr><td>2013-2014</td><td>6</td></tr>
<tr><td>2014-2015</td><td>12</td></tr>
<tr><td>2015-2016</td><td>8</td></tr>
</table>
</td></tr>
<tr><td>Patronage of Shuttle bus</td><td>Number of passengers</td><td>Data is not available at the time of writing</td></tr>
</table>

7) BIODIVERSITY AND GREEN SPACE MANAGEMENT

The University is rightly proud of it garden campuses and continues to manage the estates with due regard for the environment. The grounds are managed to maintain, and where possible increase, biodiversity and ensure that any development of the estates is not detrimental to the green spaces around campus. Promotion is ongoing through our website and events such as the Green Impact week in December offering a taster session at the allotment.

KPIs:

Performance Indicator	Metrics	Progress
Diversity of species across all campuses	Biodiversity indices (tri-annual)	No progress

8) SUSTAINABLE PROCUREMENT

Procurement will be carried out in an environmentally responsible and sustainable manner. During 2015-2016 the draft sustainable procurement policy was produced to ensure that sustainability is included within the procurement process, where financially and legally viable. The draft Sustainable Procurement Policy details our progress on the Flexible Framework and sets a target to achieve level 4 by July 2015. The policy also provides guidance to faculties and departments on how to reduce their environmental impact.

Carbon emissions from the supply chain is calculated by the North West Universities Purchasing Consortium using category spend therefore emissions increase or decrease dependent on spend, and this does not take into consideration the purchase of 'green' products which are sometimes more expensive. It is advised, therefore, to regard these emissions with caution.

GRAPH

KPIs:

Performance Indicator	Metrics	Progress
Progression against the Flexible Framework for Sustainable Development	Level attained in each aspect	**Aspect** / **Achieved majority of actions in level** People: 3 Policy, Strategy and Communications: 2 Procurement Process: 3 Engaging Suppliers: 3 Measurements and Results: 2
Spending on sustainable and recycled products	£/yr	No progress. The sustainable and recycled product element of products are not separately invoiced

9) AWARENESS AND EDUCATION

Awareness and Education are essential to the success of the Sustainability Strategy and we are continuing promote all activities under the Living Sustainably at Hope brand.

All awareness raising methods are vital to promote and publicise details of our activities and progress made including a dedicated web page, news items within staff and student communications, staff and student inductions and external relations include sustainability in external communications where appropriate.

A number of events have been held throughout the year covering the full range of sustainability activities including the Reduce-Reuse – Recycle event in September 2015, Green Impact week (including Fairtrade £1 lunch, B&M recycling promotion, Merseytravel, Make a green pledge and give it a go on the allotment) and

Christmas Switch Off in December 2015 , and Fairtrade Fortnight in February and March 2016 (activities included six word stories, attendance at Foundation Hour to give away Fairtrade items and promote Fairtrade, coffee tasting, Banana Bake Off, and a prize draw to find the Fairtrade banana hidden in the sustainability webpages).

Informal training is carried out by the NUS supported Green Impact and Student Switch Off. Green Impact is a competition between staff teams to complete a number of quick and easy actions to improve their work environment; this year eight teams competed and were awarded working towards Bronze (1 team), Bronze (4 teams), Silver (2 teams) and Gold (1 team); 224 actions were put in place and 156 were a direct action of Green Impact saving around 7.7 tonnes of CO_2. The Student Switch Off (SSO) is an energy saving competition between halls of residence and whichever halls saves the most energy per student during October, November and February wins an end of year celebration. This year the University saved 20,366 kWh (4.7%) compared to the baseline of 2010-2012 (11 tonnes of CO_2); 258 students signed up to the SSO mailing list and 421 student liked the dedicated SSO Facebook page. This year Wesley Evens won the celebration.

KPIs:

Performance Indicator	**Metrics**	**Progress**
Sustainability news items	Number of news items	Data was not available at time of writing
Induction and training events	Numbers attending events	Data was not available at time of writing

10) GLOBAL CITIZENSHIP

It is recognised that we need to engage with staff and students in learning to live responsibly and instil virtues of global responsibility though their informal and formal teaching.

No progress has been made embedding Education for Sustainable Development within the curriculum or creating a baseline on which to improve; but informal learning continues through the Green Impact and Student Switch Off programmes, the information on our website and at our events.

Conclusion

This report has only been able to provide a brief overview and progress of the wide ranging activities across the University towards transforming into a greener, more sustainable place to live, work and study.

The Corporate Plan commits that the University estate will be developed sustainably in line with the University's strategy of academic repositioning. This report highlights that we are not making as much progress as planned or hoped, but given the financial uncertainty of the future, the University prioritised its objectives therefore not all of the objectives have been actioned and therefore cannot be reported on. As we are drafting the subsequent Sustainability Strategy, this has to be taken into consideration; and we also need to ensure that we include targets which will ensure we meet the key goals set within the Corporate Plan 2016-2020.

Targets need to be considered for all of the identified key impact areas to ensure that the University continues to improve its environment and has targets to report against.

The approval and adoption of the draft Strategies, Policies and Plans mentioned in the report are vital to give authority to the sustainability agenda and we must ensure that the available funds are spent to give best value for money and individual business cases must be written for consideration where project costs exceed the available budget.

Engagement of staff, students and the Student's Union continues to be low, and this trend must be reversed, to ensure our targets are met. It is notoriously difficult, however, to engage with already busy individual, who do not see sustainability as a priority or seen as additional workload.

Everything we do has long term implications and the University needs to balance the often competing aims of Higher Education such as reducing our carbon footprint, whilst increasing (and retaining) student numbers, providing high quality teaching and research facilities, and improving student satisfaction.