

Environmental Sustainability Report

2018-2019
Q1 and Q2

I ♥ MY
Campus



LIVERPOOL
HOPE
UNIVERSITY
Est. 1844

Welcome

Welcome to this progress report which summarises the activities, initiatives and projects undertaken during the first half of the 2018-2019 academic year. The report also detail progress against the key goals set out in the 2017-2018 annual report.

Commitment

Sustainability is central to the University's Mission and Values and is included within the University's Corporate Plan Key Goals 2016-2020, which commits the University to:

- redouble its efforts to engage students in learning to live responsibly and to instil virtues of global responsibility;
- continue to seek value for money in all its activities and regularly review its purchasing, budgeting and operating procedures;
- reduce the University's carbon footprint by reducing utilities by 25% [from the 2005-2006 baseline] plus a 2.5% year-on-year carbon saving between now [2016] and 2020;
- include environmental sustainability into all refurbishments and new build projects;
- ensure space utilisation is optimised; and
- maintain and enhance a high quality estate that is inspiring, aesthetically pleasing, welcoming and accessible, using the best technological solutions were appropriate

The University's draft Sustainability Strategy (2015-2016 to 2020-2021) aligns with, and directly supports, the delivery of the Corporate Plan Key Goals and defines the objectives and targets to maintain, and where possible, enhance the quality of its environment for its staff and students living and working at the University in eight key impact areas; namely: Awareness and Engagement, Utility Management, Travel and Transport, Waste Management, Campus Development, Procurement, Sustainable Food and Biodiversity and Landscape. The targets contained within the draft Sustainability Strategy informed the 2017-2018 annual report key goals.

Governance

The Sustainability Manager will facilitate the implementation of the actions and will lead on the Awareness and Engagement, Utility Management, Travel and Transport, and Waste Management impact areas, working with other departments as required. The Campus Development and Biodiversity and Landscape; Procurement; and Sustainable Food impact areas are managed by Estates, Procurement and Catering, respectively, with input from the Sustainability Manager as required.

The overall responsibility, and accountability, of the sustainability agenda sits with the University Council and the Office of the Vice Chancellor. Whilst the University accepts the main responsibility, all staff, students and visitors have a very important role to play in managing material and resources responsibly and accounting for the impacts of their individual choices and actions. Every one of us is able to make a positive contribution.

Community Awareness and Engagement



Awareness and Engagement continues to play a critical role to ensuring that the key goals set out in the Corporate Plan, draft Sustainability Strategy (2015-2016 to 2020-2021) and 2017-2018 Annual Report are met. All activities are branded as I ♥ MY Campus and we are continuing to increase our activities and making it hard not to notice the sustainability agenda.

All awareness raising methods are essential to promote and publicise details of our activities and the progress that we've made.

Regular **communications** are released via:

- Social Media – via the Living Sustainable at Hope Facebook page. Information is posted at least twice a week, including 'Top Tip Tuesday'
- Sustainability Website
- Hope Bulletin - including utilities performance update (September), promotion of the Switch Off Over Christmas event (12/12 and 19/12) and the numbers of cups saved since the introduction of a 25p charge (31/10 and 19/12)
- Campus Screens – including Pack For Good (September) and the Cycling and Walking Event (September)
- Presentations and workshops – such as the Procurement Working Group (12/09), Education Faculty Forum (03/10), the I ♥ My Campus Challenge was used during a Women's Network event (25/10) to show how participating in the Challenge has developed the team's leadership skills
- Publications and newsletters – including the student induction essential information and notebook; accommodation moving in guide; staff induction booklet; and alumni newsletter (November)

Events have been held throughout the year to showcase sustainability within the University, including:

- A stand at Fresher's Fair to promote waste and recycling
- Cycling and Walking Event (19/09) – attended by I ♥ MY Colleagues, Living Streets, Arriva and Merseyside Sports Partnership
- University Mental Health Day (10/10) – stand promoting safe cycling, Hope Park tree walks, Cyclescheme, Arriva Click, Arrive bus discount tickets, drive smarter, a cyclist's breakfast and a cycle ride between Aigburth Park and Hope Park led by the Aigburth local councillor and British Cycle Leader.
- Cycle ride around Calderstone's park from Hope Park (28/11)
- #winterwoolly competition was launched at the end of November with the staff prize being awarded at the Christmas Carol Service (19/12)
- New Year, New You (week commencing 21/01)

The I ♥ MY **Campus Challenge** is one of the main ways that staff and students can engage with the sustainability agenda through the completion of a series of quick and simple actions. The Challenge was launched to staff and students in November.

Staff teams compete against each other to complete the actions between November and April, are audited by other teams in the Challenge and then presented with their awards by the Vice Chancellor at the end of the academic year. Information and support is provided through regular emails, Facebook posts and workshops. This year nine teams have signed up (last year ten teams were competed within the Challenge)

I ♥ MY
Campus
Challenge

Students in halls compete against each other to reduce their electricity consumption (between October and April) and whichever hall reduces its consumption (per student) by the most wins an end of year celebration. The student challenge is run via Facebook with weekly 'Top Tip Tuesdays' providing energy saving hints and tips. Between October and January only four of the eleven halls had reduced their electricity consumption per student compared to last year.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Policy & Procedures	<ul style="list-style-type: none"> Approval of the Sustainability Strategy and the Carbon Management Plan 2015-2016 to 2020-2021 	High	No progress – still in draft
Communication & Information	<ul style="list-style-type: none"> Continue to develop and establish activities, and raise the profile of I ♥ MY Campus 	High	Ongoing.
Communication & Information	<ul style="list-style-type: none"> Enhance coherence of all activities and achievements cross the University 	Medium	Ongoing. Collaborate with SDW and I ♥ MY Colleagues to organise events, such as World Mental Health Day (10/10) and New Year, New You (week commencing 21/01)
Communication & Information	<ul style="list-style-type: none"> Form a close working partnership with the Student's Union and other student focussed departments to ensure greater engagement with our student body 	High	Ongoing. Limited progress made
Project	<ul style="list-style-type: none"> Deliver a successful I ♥ MY Campus Challenge 	High	Ongoing.
Control & Reporting	<ul style="list-style-type: none"> Provide regular progress reports to all stakeholders 	Medium	Ongoing. This is the first mid-year report; the annual report will be produced in October
Personnel	<ul style="list-style-type: none"> Recruit a network of sustainability champions from across the University to become the 'eyes and ears' of sustainability and engage with their colleagues to encourage department/faculty specific actions to be taken and also provide a method for feedback and to report on available opportunities 	Low	No progress.

Carbon Management

The University collects and measures its carbon emissions (Scope 1 – gas, fugitive emissions and fuel used within University owned or leased vehicles; Scope 2 – electricity; and Scope 3 - water consumption and disposal, recycling and waste disposal, staff and student commuting, business travel and supply chain). The carbon conversion factors (used to convert the usage [kWh, m³, L etc.] into carbon emissions) are not released by the Government until June 2019; therefore it is not appropriate to discuss the carbon emissions in this progress report, it is more appropriate to consider the usage / consumption. However, for completeness an update to the 2017-2018 report data is provided.

Carbon Management is not one of the key impact areas as defined in the draft Sustainability Strategy (2015-2016 to 2020-2021), but it commands its own section as the subsequent impact areas (excepting Biodiversity and Landscape) produce carbon emissions enabling the University to calculate its complete carbon footprint. The carbon emissions also form part of the Corporate Plan Key Goals and are reported in the Estates Management Record (annual data submission to the Higher Education Statistics Agency), though Scope 3 emissions are reported voluntarily.

Scope 1 and 2 emissions

2017-2018 update – the University’s Scope 1 and 2 emissions (including the Scope 3 element for completeness) has decreased by 1602 tonnes (27%) since 2005-2006 and we have already achieved our 2.5% annual reduction target set within the Corporate Plan. It must, however, be noted that this is mainly caused by the reduction in the carbon conversion factors for electricity owing to the mix of energies used to create the electricity (an increase in the proportion of renewable and a decrease in coal).

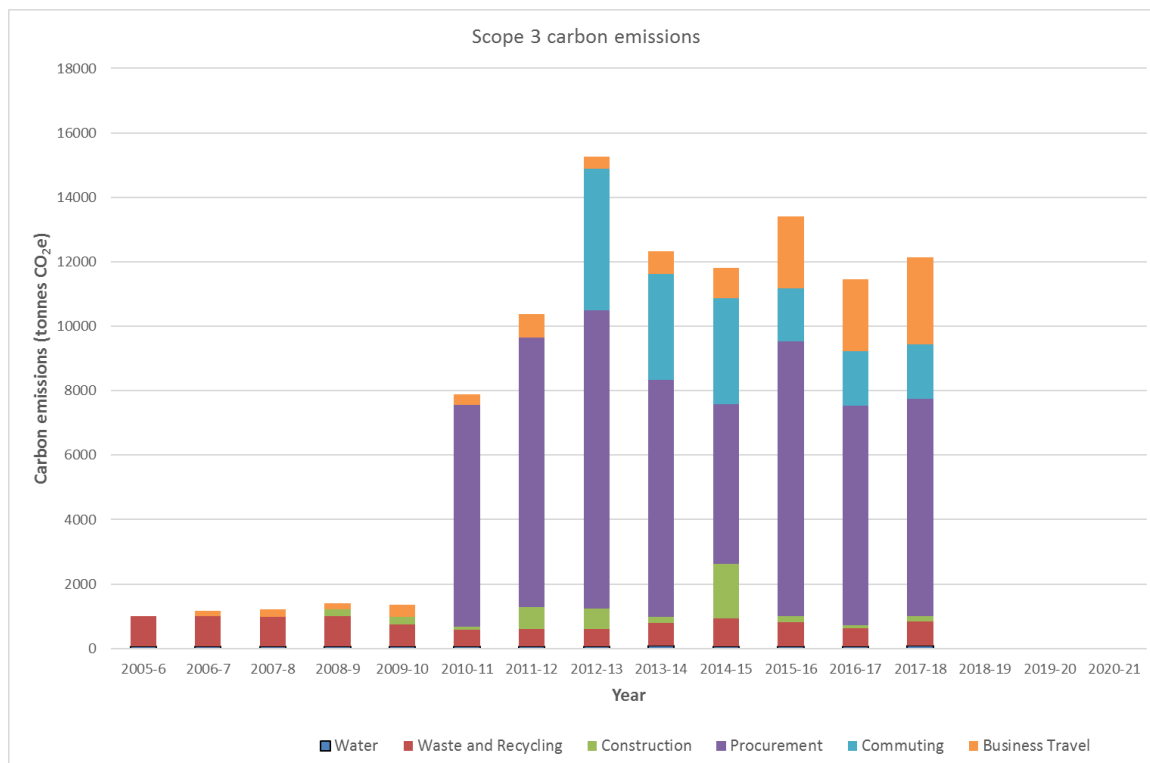


Scope 3 emissions

2017-2018 update - Scope 3 emissions are the most significant contributor to the University’s carbon footprint, which are a consequence of our actions, but occur at sources which are not owned or controlled by us. The data shown is still incomplete and does not show our full Scope 3 impact with limited data

included from construction waste and recycling and business travel (limited resources are available to interrogate the data from expense claims (both paper and electronic expenses) and Barclaycard purchases)

The 2017-2018 annual report did not include the Scope 3 emissions relating to the supply chain as the North West Universities Purchasing Consortium had not released the data at the time of publication, this has now been included below.



The data provided for Scope 3 emissions is variable and depends on which year the carbon conversion factors became available and in the last few years the availability of, and resources to collate, the data and calculate the emissions.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Data Gathering & Analysis	<ul style="list-style-type: none"> Ensure that all data is collected to enable the calculation of our carbon emissions 	Medium	Ongoing. Outstanding – construction recycling and Waste data. Estates to provide. Outstanding – business travel. Additional resources are required to collate and interrogate the data from travel expenses and Barclaycard.
Project	<ul style="list-style-type: none"> Continue to reduce the carbon emissions of the University through the implementation of identified projects 	Medium	Ongoing.
Control & Reporting	<ul style="list-style-type: none"> Produce Scope 3 carbon reduction targets to 2020-2021 	Low	No progress.

We recognise that we need to do more to reduce our carbon emissions across all scopes.

Utility Management

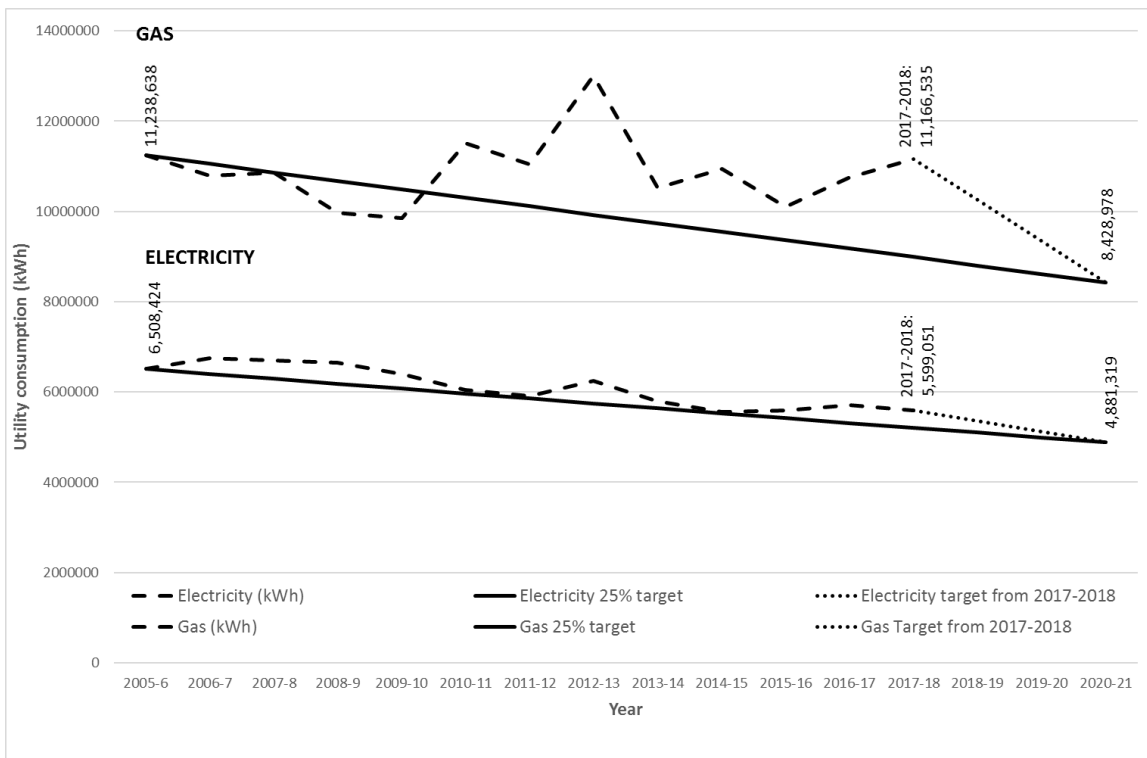


Utilities (gas, electricity, water and waste water) were a significant proportion (~9.5%) of the University's 2017-2018 non-pay spend and contributed ~27% of the University's carbon footprint (excluding business travel).

Please note, the utilities reported here do not include those from the residential houses that the University owns and rents out.

Electricity and Gas

The University reduced its consumption of electricity by 14% between 2005-2006 and 2017-18 but only reduced its gas consumption by 0.6%; falling well short of the 25% reduction key goal within the Corporate Plan.



To achieve the Corporate Plan targets (from 2017-2018 consumption), we have to reduce our consumption to:

	Electricity (kWh)	Gas (kWh)
2018-2019	5,359,807	10,254,016
2019-2020	5,120,563	9,341,497
2020-2021	4,881,319	8,428,978

The electricity reduction per year is 239,244 kWh - the equivalent of switching off the Gateway building for the entirety of 2018-2019 and then equivalent consuming buildings in 2019-2020 and 2020-2021.

The gas reduction per year is 912,519 kWh –the equivalent of switching off the EDEN building for the entirety of 2018-2019 and then equivalent consuming buildings in 2019-2020 and 2020-2021

August – January

Comparing against the same period last year electricity consumption has increased by 1.5% (with an increase in costs of 41%) and gas consumption has decreased by 5.6% (with a decrease in costs of 7.2% nb, this excludes the costs of the January HCA invoice as this is included within February's invoice). Further detail and progress towards our targets are shown below:

Consumption (kWh)	Electricity	Gas
2018-2019	2,867,062	5,260,712
2017-2018	2,825,493	5,572,217
Difference	+41,569	-311,505
Difference (%)	+1.5	-5.6
2018-2019 target	5,359,807	10,254,016
% to target	53	51

Cost (£)	Electricity	Gas
2018-2019	438,198	142,851
2017-2018	311,540	153,919
Difference	+126,657	-11,068
Difference (%)	+41	-7.2
2018-2019 budget profile (to January 2019)	411,768	144,526
% against budget profile (to January 2019)	+6.4	-1.2

Electricity consumption (and therefore costs) have increased despite a number of reduction projects being completed namely: improved roof insulation in St Michaels, LED lighting replacement in the library ground floor and improved lighting control in the FML Chapel. Electricity is mainly user controlled and therefore it is imperative that our staff and students engage with this agenda.

During 2017-2018 the University acquired three new buildings: 285 Woolton Road (November 2017), 3-7 Shaw Street (January 2018), and 3 Islington Square (the utilities transferred to the University in April 2018). These new buildings increased our electricity consumption by 1,156 kWh in 2017-2018 and 54,594 kWh in 2018-2019; if these buildings had not been added to our portfolio the electricity consumption in 2018-2019 would have decreased by 0.2%.

The University's sub-meters allows us to compare consumption down to building level in the majority of cases; this allows us to focus our activities on those buildings which have either increased their consumption by the largest amount compared to the same period last year; and/or consume the a high proportion of the total consumption, which then enables us to prioritise our actions. The sub-meters also provide data on a half-hourly basis, which allows us to interrogate the timing of consumption to investigate any potential wasted energy, such as in the evenings, overnight or at the weekend. Those buildings which have increased their usage between August and January 2018-2019, compared to last year are shown below; further investigations and interventions are required to reverse this trend.

	% Increase	% of total consumption	Priority
Creative Campus Security Lodge (includes external lighting and fountain)	37	1.7	Medium
Markland	12	0.5	Low
Austin	10	0.8	Low
Cornerstone	8.0	6.0	High
FML, Green Lane Building, Hope Park Security Lodge	6.8	21	High
Angela	6.2	0.7	Low
HCA, Estates, EDEN (excluding hotel), Health Sciences and Hope Park Sports	3.8	29	High
Business School	3.1	0.9	Low
Wesley Odd	0.8	1.7	Medium

Gas consumption (and therefore costs) have decreased because of the completion of a number of projects namely: 1) Phase 1 of the Building Management System installation was completed in October 2017 (Capstone, Cornerstone, Hopkins Hall, Gateway Building, EDEN [excluding Arbour Room], Our Place, Hope Park Sports and Health Sciences) and the controls have continued to be fine-tuned to ensure that the heating and hot water systems are operating as effectively and efficiently as possible; 2) the Heating Policy is being more strictly applied; 3) Phase 2 of the Building Management System installation has begun (Conference Centre and LTC media are complete); 3) replacement roof (with increased insulation) in the Alexander Jones Building; 4) installation of Thermostatic Radiator Valves in the FML fourth floor; and 5) increased roof insulation in St Julies.

The three new buildings acquired in 2017-2018 have increased our gas consumption by 42,263 kWh in 2017-2018 (285 Woolton Road) and 50,090 kWh (285 Woolton Road and 3-7 Shaw Street) in 2018-2019; if these buildings had not been added to our portfolio there still would have been a reduction in consumption of 4.6%; meaning that the gas reduction projects implemented have mitigated the increase. It must be noted that 2018-2019 will be the first year that we have complete consumption data for the new buildings, and consumption is likely to increase given the redevelopment of the buildings.

Automatic meter readers have been installed on the majority of gas fiscal meters, again allowing us to compare consumption down to a half hourly basis. The buildings which have increased consumption during 2018-2019 compared to the previous year are shown below; further investigation is required and intervention where necessary to manage and mitigate this increasing trend.

	% Increase	% of total consumption	Priority
Malachy Flat	23	0.4	Low
Taggart Lodge	20	0.5	Low
FML main kitchen, Green Lane Building labs	7.5	1.7	Medium
HCA, SWL, Hope Park Sports, Estates, Health Sciences	4.1	28	High
EDEN Kitchen	2.2	1.1	Medium
Stand Park Lodge	0.9	0.3	Low

Please note, that no consideration is given to the weather patterns or any other external factors when comparing consumption against previous year's data.

It must be remembered that any redevelopment or refurbishment of the Estate (see Campus Development section) will increase the consumption of utilities and therefore erode any progress made.

It is more important than ever to reduce consumption to keep costs at a manageable level. Immediate focus must be given to the reduction in electricity consumption given the huge increase in consumption (and therefore costs); despite gas being further away from achieving the 25% reduction target, great strides have been made in reducing the consumption and this will continue with further installation and fine tuning of Building Management Systems (including the completion of Phase 2).

A carbon reduction project list has been created as part of the draft Carbon Management Plan; the implementation of these projects and activities are required to ensure that we achieve a reduction in consumption, costs and achieve our targets. This project list is not a static document and changes as projects are completed and new projects are identified, and, where possible, quantified.

Water

Water consumption has increased by 15.3% between 2005-2006 and 2017-2018; although no consumption reduction target has been set this increasing trend needs to be reversed to reduce the associated costs.

Consumption has increased by 17.6% with a corresponding increase in costs of 4.5% compared to the same period (August to January) last year. Meaningful comparisons are very difficult to make because of the change in billing period for most meters from quarterly to monthly and a number of the larger accounts have been credited and re-billed over a long time period. To ensure that more accurate data, and therefore invoices, are received meter reads are now being submitted on a monthly basis, where the data is available.

Water has not previously been given high priority because of its low carbon footprint (77 tonnes in 2017-2018; compared to 1,974 tonnes for electricity and 2,340 tonnes for gas) and having the lowest cost of the three utilities (£293k in 2017-2018; compared to £714k for electricity and £355k for gas). However, with the increasing consumption and costs, we now need to give higher priority to managing and reducing our water consumption.

Contracts

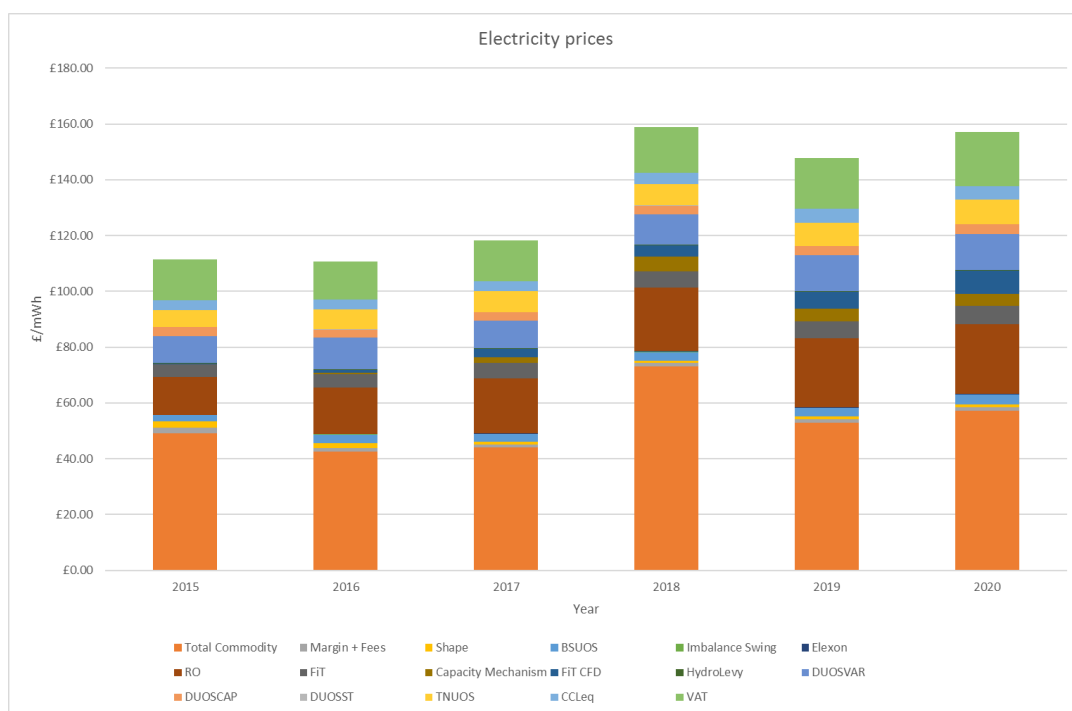
The University renewed its **electricity contract** in October 2018 via The Energy Consortium's framework, following the end of a three year contract. The University's new energy contract adopts a risk managed flexible approach (rather than the previous fixed price / fixed term contract with higher risk premiums with prices set at a particular date and time). A flexible contract means that the energy is procured following the market price and therefore purchases are made throughout the contract at the lowest price and therefore avoid the dramatic price increases that happen at the end of fixed contracts. Appendix A provides further comparisons between flexible and fixed contracts.

Purchasing electricity is complex comprising of both a commodity (i.e. the wholesale cost, which is traded on the open market) and Non-Commodity Costs (the cost of operating and upgrading the transmission and distribution network and a number of additional charges which are levied to ensure security of supply, delivery of affordable energy and to support the Government achieving its carbon budgets and Climate Change Act reduction targets). Since the start of the previous contract in October 2015, average Commodity costs have increased by 61% and in 2018, increased volatility saw Commodity prices spike at levels not seen for two years, in which time the Non-Commodity Costs (NCC) also increased by 25%. The Commodity costs are only ~40% of the total electricity cost and are charged on a p/kWh basis – which is set dependent on the market price at the time of purchase. The NCC accounts for the remaining 60% of the total cost and are charged on both a p/kWh and fixed price (i.e. p/day) basis; these charges cannot be influenced or changed

by the University. The only option to reduce our costs, is to reduce our consumption and to investigate when the energy is being used (i.e. trying to avoid the peak charges of between 1600 and 1900).

The new contract has seen the University's electricity charges per kWh (total costs including VAT) increase from ~12p/kWh to ~19p/kWh. The graph below has been provided by The Energy Consortium to show the changes in Commodity and Non-Commodity Costs (NCC) between 2015 and 2020 for a University who consumes a similar amount of electricity. They have also seen price increases from ~11p/kWh to ~16p/kWh; however, the increase to ~19p that we have seen can be explained by:

- The comparable University has been a TEC member for a number of years and has therefore been able to take greater advantage of the forward purchasing strategy
- Distribution charges are different depending on where you are located in the country
- TRIAD charges differ depending on the meter – The TRIAD refers to the three half-hour settlement periods with highest system demand between November and February, separated by at least ten clear days. National Grid uses the TRIAD to determine Transmission Network Use of System charges for customers with half-hour metering. TRIAD charges can add up to 4p/kWh to the costs.



Commodity costs are continuing to increase and become more volatile with the potential currency fluctuations as a result of Brexit; while NCC costs are set to increase with: 1) the increase in Climate Change Levy (CCL) in April 2019; 2) the potential lowering of the Energy Intensive Industries exemption threshold, which will pass in additional costs onto non-energy intensive consumers; and 3) the Targeted Charging Review, which is examining how distribution costs are charged to consumers, amongst others.

- Brexit - The UK is a net importer of both gas and electricity to meet our energy needs; from interconnectors with continental Europe to LNG deliveries, mainly from the Middle East. Being part of the Internal Energy Market makes it easier to trade energy across borders, keeping tariffs down, improving security of supply and facilitating the integration of more renewables onto the system. The UK will be increasingly reliant on gas to meet our needs when renewables are not available, with the closure of coal-fired power stations and uncertainty over new nuclear plants. Although it is unlikely that cross border trading will cease; leaving Europe without a, or a poor, deal means that trading could not be as frictionless as it currently is, which would increase costs (potentially costing the UK up to £500M/year), reduce efficiency and potentially derail our transition to a low carbon economy. Brexit could also lead to the fall in value of the pound relative to the euro and dollar (as we purchase a portion of our energy through these currencies) which would push wholesale costs up. Non-commodity costs are currently paid in Sterling and should not be immediately affected.

- Carbon Reduction Energy Efficiency Scheme (CRCEES) – the scheme ends in April 2019 (final reporting year is April 2018 to March 2019), with the final payment due in September 2019. To recover the revenue that will be lost through the close of the scheme (reported to be ~£790M), the CCL will increase in April 2019.
- Climate Change Levy - The CCL will rise 45% for electricity (from 0.0583p/kWh to 0.00847p/kWh) and 67% for gas (from 0.00203p/kWh to 0.00339p/kWh). Over the next few years, the Government will ensure that the CCL charges are equal for electricity and gas, though there is some uncertainty how and when this will happen.

The **gas contract** will be renewed in October 2019 and we can expect to see similar price increases that we have experienced with the electricity contract.

Costs

Costs for all elements of utilities are set to continue to rise and become more volatile. To mitigate these effects it is imperative that we consume less and ensure that we review existing processes to make sure they are efficient as possible, and to ensure that we are not paying for wasted usage.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Data Gathering & Analysis	<ul style="list-style-type: none"> • Scrutinise the sub-meter electricity and gas data to identify any areas of wastage 	High	Ongoing. The sub-meter data is regularly checked, analysed and any issues reported to Estates.
Data Gathering & Analysis	<ul style="list-style-type: none"> • Continue to report energy wastage to Estates to resolve 	High	Ongoing. As above. Monthly meetings are held with Estates to discuss any utility issues
Project	<ul style="list-style-type: none"> • Reduce consumption of utilities and costs to achieve the reduction targets and available budget 	High	Ongoing. The University is <u>not</u> on course to achieve the reduction targets set within the Corporate Plan nor the available budget. It is imperative that focus be placed on reducing the consumption of utilities.
Policy & Procedure	<ul style="list-style-type: none"> • Explore the feasibility of tendering our water provision via the Crown Commercial Services framework 	Low	Complete. The University engaged with the Crown Commercial Services' competition for Water and Wastewater Services, but ultimately did not switch supplier.

Travel and Transport



The University continues to promote sustainable travel options to enable staff and students to make informed decisions about which travel mode to use, such as Cyclescheme, Arriva discount bus tickets, Arriva Click and Liverpool City Bikes.

Staff Travel Survey – a snap shot travel survey was taken in April 2018 and a number of actions were identified to improve sustainable travel choices; progress against which can be seen below:

Action	Detail	Progress
Improve cycling facilities	<ul style="list-style-type: none"> a) Monitor the usage of the cycle parking to understand if supply meets demand. b) Investigate opportunities to make cycle facilities more secure c) Investigate opportunities to provide more facilities for cyclists, including access to showers, lockers and changing facilities 	<ul style="list-style-type: none"> a) No progress b) No progress c) No progress
Encourage staff to try walking and cycling	<ul style="list-style-type: none"> a) Organise challenges to encourage people to try walking or cycling; b) Provide prizes for challenges to incentivise and increase participation; c) Organise promotional events to increase awareness and the benefits 	<ul style="list-style-type: none"> a) Plas Caerdeon Challenge – (19/09 to 10/10) to cover the 90 miles from Hope Park to Plas Caerdeon. A Fit Bit was offered as an incentive. b) Branded water bottles are available as prizes / incentives for staff to walk or cycle to work c) Dr Bike Session organised for New Year New You event (January)
Increase walking and cycling to the site	<ul style="list-style-type: none"> a) Set up a 'Bicycle User Group' / 'Walking Group' and appoint a 'cycle champion' / 'walk champion' as a point of contact to lead on workplace initiatives; b) Encourage lunch-time walk or cycle-rides c) Walk leader training can be offered to staff through Living Streets d) Promote or organise cycle training, such as BikeRight e) Provide cycle equipment e.g. puncture kit, D-locks to facilitate cycling; f) Promote the use of the 'Cycling Works' website that supports and promotes cycling in Merseyside g) Promote cycle groups to staff to make them aware of services available in Merseyside e.g. Cycling Projects, Wheels for All and Pedal Away h) Provide cycle/walking information/routes to staff, such as 'Get to Guides'; Merseytravel public transport area and route maps; cycle maps; details of cycle parking, showers/lockers; etc. i) Promote use of online journey planning tools (e.g. www.Walkit.com; www.cyclinguk.org, Merseytravel journey planner) 	<ul style="list-style-type: none"> a) No progress b) No progress c) Details available on website d) Details available on website and emailed to I ❤️ MY Campus Challenge teams e) No progress f) Details available on website g) No progress h) Partially complete. Some links available on website i) Details available on website

	<ul style="list-style-type: none"> j) Promote bike purchase through the Cycle to Work Scheme k) Make staff aware of <u>Citybike</u> and <u>Bike&Go</u> 	<ul style="list-style-type: none"> j) Details available on website and in staff induction brochure k) Details available on website
Encouraging Public Transport Use and Car Sharing	<ul style="list-style-type: none"> a) Hold events on site to share travel information b) Liaise with bus and rail operators to investigate specific discount and ticketing schemes and to understand any upcoming changes/improvements to services c) Consider the introduction of an informal or formal car share scheme for Liverpool Hope University staff. https://liftshare.com/uk 	<ul style="list-style-type: none"> a) Events held on 19th September and New Year New You Event b) Arriva annual bus ticket payable by DD is advertised on website and at the events. Stagecoach do not provide a similar offering c) No progress

Fuel used within University owned or leased vehicles – usage is collected and monitored via purchases made on our Fuelcards. The University has decreased its consumption of diesel by 3% compared to the same period last year, but consumption of petrol has increased by 73% because of the increased fuel used within the gardening equipment. The carbon emissions form part of the 2.5% year on year carbon reduction target; however, they are minimal (between 15-16 tonnes CO₂e) so no specific reduction projects have been identified or reduction targets set.

KEY GOAL for 2018-2019

Theme	Commitments	Priority	Progress
Data Gathering & Analysis	<ul style="list-style-type: none"> • Ensure that data is collected to enable the calculation of the carbon emissions 	Medium	Ongoing. Resources are unavailable to interrogate the travel and subsistence forms or the Barclaycard, so business travel data is not being collected.
Communication & Information	<ul style="list-style-type: none"> • Continue to promote sustainable travel options 	Low	Ongoing. 7 th March – University Mental Health Day promoting walking and cycling May – National Walking Month / pedometer challenge
Project	<ul style="list-style-type: none"> • Explore the implementation of actions raised in the staff travel survey 	Low	See table above.

Waste Management



The principles of the waste hierarchy (prevent, reduce, reuse, recycle, recover) are continuing to be embedded throughout the University and we continue to promote the British Heart Foundation and Better World Books reuse and recycling schemes.

Operational waste – We continue to send zero waste to landfill and have recycled 39.6% through source segregation of our waste (through the provision of plastic, can, paper, card, confidential paper, glass and food waste collections) compared to 31.3% in the same period last year. We have also reduced our general waste by 12% (112 to 92 tonnes). An identified project is to increase our recycling rates, which will, in turn, reduce costs as recycling is cheaper than general waste. Audits of our waste and recycling will determine the composition of materials within the bags and therefore help us determine whether we have the right bins in the right locations and what materials we need to focus on to increase recycling, decrease contamination, and ultimately reduce costs.

Additional, clearer, communications are required to ensure that the right thing goes in the right bin. When funding is available, signage is required above each recycling station across campus to promote what can go in each bin (the only signage at present is on the lid, which is not clear or easily read). It is likely that charges will be introduced penalising any contamination of recycling, so it is imperative that we provide clear communications now before the additional charges are introduced.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Communication & Information	<ul style="list-style-type: none"> Increase promotion of what can go in each bin to reduce contamination and increase recycling 	High	Ongoing. SUEZ (waste and recycling contractor) attended the New Year, New You event (31/01).
Data Gathering & Analysis	<ul style="list-style-type: none"> Ensure waste and recycling data is provided by our construction partners 	Medium	Outstanding - Estates to provide the required data
Communication & Information	<ul style="list-style-type: none"> Continue to promote donations through the BHF donation banks and Better World Books 	Low	Ongoing. Bulletin articles, social media posts and TV screen information have been released
Project	<ul style="list-style-type: none"> Look at ways to reduce the waste produced throughout the University 	Low	Ongoing.

Campus Development



The University estate continues to grow and develop to meet the many demands placed upon it. The major acquisitions and developments during 2017-2018 included the purchase of 3 Islington Square, 3-7 Shaw Street and 285 Woolton Road (adding 3,728m² (gross internal area) to our building footprint) and the redevelopment of HCA West Wing; and in 2018-2019 the redevelopment of 3-7 Shaw Street and Cornerstone Ground Floor were completed.

The redevelopment of 285 Woolton Road, Cloisters and Hermitage are planned to start during 2018-2019 and will increase the consumption of utilities and impact on space utilisation, but these impact are not known at present. Other planned refurbishments include replacing the Angela and Austin roofs and replacing the single with double glazing, which will have a positive impact.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Policy & Procedure	<ul style="list-style-type: none"> Ensure sustainability is integrated in all aspects of refurbishment and construction works 	Medium	Ongoing.
Data Gathering & Analysis	<ul style="list-style-type: none"> Consider the rationalisation of the Estate, especially over the summer period 	Low	No Progress.
Data Gathering & Analysis	<ul style="list-style-type: none"> Investigate the utilisation of the available space and explore whether it could be used more efficiently such as evening and weekend teaching and events 	Low	Ongoing. Evening and Weekend teaching moved into FML from November 2018 and conference bookings have predominately moved into FML from January 2019. Hope Park Sports and Sheppard Worlock library are also available for Evening and Weekend teaching and events.



Procurement



The University continues to work towards obtaining best value for money when procuring goods, services and works and takes into account the social, environmental and economic impacts, such as the use of the wide range of collaborative purchase agreements available via the North West Universities Purchasing Consortia.

The **Procurement Working Group** met in November 2018 to provide updates of available frameworks / contracts, identify, share and promote best practice, and allow feedback

NetPositive's Supplier Engagement Tool continues to be promoted to assist our supply chain in further identify opportunities to embed sustainable practices; though we acknowledge that we need to work with more suppliers (especially those of high-spend, high-risk) to ensure that they sign up and create their own bespoke action plans, which can be used as part of the contract management meetings.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Data Gathering & Analysis	<ul style="list-style-type: none"> Work with suppliers to create their bespoke sustainability action plan using the Supplier Engagement Tool 	Low	Ongoing.
Communication & Information	<ul style="list-style-type: none"> Continue to promote sustainable procurement principles and practices 	Medium	<p>Ongoing. Regular procurement working group meetings take place (12/9).</p> <p>The Procurement Strategy has been updated and is in draft form awaiting approval.</p>
Project	<ul style="list-style-type: none"> Undertake a supply chain risk assessment to identify any potential gaps in compliance of the Modern slavery and human trafficking statement 	Low	No progress.

Sustainable Food



Catering introduced a **25p charge for takeaway cups** at the end of September and by the end of December over 16,000 disposable cups were saved by either customers drinking in or bringing their own mugs. This is compared to only 1,650 cups being saved in the whole of 2017-2018 when a 10p discount was offered.

A new range of **branded mugs** is being investigated for sale within the catering outlets. Starbucks have their own range of £1 reusable mugs for sale.

A **50p container charge** was also introduced to encourage customers to eat in or bring their own containers, though limited information is available on numbers.

Paper straws are now available across campus at a charge of 5p, except where straws are required in the drink such as the Our Place 22oz soft drink and Starbucks frappés etc.

All **plastic cutlery and stirrers** have been removed from the catering outlets and have been replaced by metal and wooden cutlery; however, it must be noted that a large number of metal cutlery (and mugs) are not returned to the outlets, placing additional pressure on the catering budget.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Project	<ul style="list-style-type: none"> Increase the provision of free drinking water 	High	Complete. Available in Fresh Hope, LTC foyer, EDEN Café, Chapters Café, and Hope Park Sports Foyer
Project	<ul style="list-style-type: none"> Introduce a cup and container levy 	High	Complete.
Data Gathering & Analysis	<ul style="list-style-type: none"> Investigate the impact of the new NUS / Fairtrade University status 	Low	Complete. The new scheme has introduced new themes and actions offering the opportunity for deeper engagement across a broader range of areas, such as embedding Fairtrade, ethical procurement and responsible consumption initiatives. This scheme is now chargeable (supported participation fees for the first two years are £2,135 plus VAT) and tiered award levels are available. The scheme is audited by trained students.
Project	<ul style="list-style-type: none"> Explore the provision of a branded water bottle 	Medium	Ongoing.
Project	<ul style="list-style-type: none"> Provide a reusable branded eco-mug for sale 	Medium	Ongoing.
Project	<ul style="list-style-type: none"> Remove all plastic cutlery, stirrers and straws from use and replace with more sustainable alternatives, and limit their availability where possible 	High	Complete.

Biodiversity and Landscape



Following the development of the 4G sports pitch and the removal of the scrub area; new native woodland species were planted following the collaboration of Geography and Environmental Science students and the Wildflower Centre as part of the Northern Flowerhouse initiative.

KEY GOALS for 2018-2019

Theme	Commitments	Priority	Progress
Communication & Information	<ul style="list-style-type: none">Continue to promote biodiversity across campus through our tree walks and other events	Low	No progress
Communication & Information	<ul style="list-style-type: none">Encourage staff and student involvement on the allotment	Low	No progress. The Student's Union took over responsibility of the allotment in 2017

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 University's Corporate Plan (2016-2020) commits the University to achieve certain sustainability key goals and this report has highlight that we are not on target to the 25% reduction in electricity and gas. Given this key goal, and the necessity to achieve the budget, focus has been prioritised on raising awareness and increasing engagement and utility management.

There are seven other key impact areas identified within the draft Sustainability Strategy and reported on in the annual and progress reports. Campus Development and Biodiversity and Landscape; Procurement and Sustainable Food and managed by other departments with collaboration with the Sustainability Manager as required. Although Travel and Transport, and Waste Management have not been treated as a priority, activities have still continued, though on a small scale. These key impact areas do not have any formal targets to achieve and are reported voluntarily to the Estate Management Record.

Utility Management and Awareness and Engagement must continue to be the priority for the rest of the year.

The carbon reduction project list identified projects and activities which are required to ensure the University progresses towards achieving its targets, with an identified investment of at least £1.02M (gross). Continued work is required to ensure that all identified projects are quantified on both a cost and carbon saving. The sustainability budget was not allocated this year, but various Estates budgets have contributed to various reduction projects (such as the SWL ground floor LED lighting) and a business case was written (and approved) for additional funds to implement phase 2 of the Building Management System installation. Work needs to continue to address the funding gap and business cases submitted to ensure that additional reduction projects (primarily electricity and water focussed) are completed and we therefore achieve a reduction in consumption, costs, and achieve our targets.

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. Initiating, and maintaining, behaviour change is, however, notoriously difficult when engaging with already busy individuals and the I ♥ MY Campus Challenge is commonly seen as additional workload and is one of the first activities side-lined, or it is simply seen as unnecessary or 'not my job'!

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.

Further Information

For further information, please visit our sustainability pages on the University website and our Facebook page.

<http://www.hope.ac.uk/gateway/sustainability/>

<https://www.facebook.com/LivingSustainablyatHope/>

Appendix A:

Fixed v Flexible Energy Procurement

Under the new electricity and gas contracts the University has adopted a 'flexible' energy procurement model, rather than the traditional 'fixed' model. The University collaborates with a number of universities and public sector bodies through TEC (The Energy Consortium), a Public Buying Organisation (PBO) specialising in energy and energy procurement. The University's energy consumption requirements are aggregated within a trading 'basket' or ~170 members (85 universities – new members include University of Strathclyde Glasgow, University of Chester and Bucks New University) and bought in smaller 'trades' within six month seasons.

More TEC members have switched from the traditional fixed price to their flexible frameworks, as a result, whilst in 2015-2016 their flexible portfolio comprised 70% of the total, this year it is at 95%.

Flexible Energy Procurement

TEC purchases the utility (electricity and gas) on a flexible basis, which is risk managed and avoids the budget re-forecast that can occur at the end of a fixed period i.e. the prices follow the market. One of the benefits of using the TEC flexible model is they have dedicated energy buyers who are responsible for purchasing the energy at the optimum time using data from four broker screens and supported by comprehensive and independent market analysis; fundamental analysis (supply v demand); technical analysis (study and interpretation of trends / volatility of the commodity market) and other measures and tools including Capital / Value at risk.

The flexible portfolio, in which all member gas and electricity volume is aggregated (i.e. the basket), is purchased on a three year rolling basis and establishes minimum purchases depending on the proximity to the start of the delivery period, usually six month periods commencing in April and October from a maximum of three forward years. This enables TEC to lock in some of the costs at one time, spreading the price risk over a number of purchasing decisions throughout the contract. An advantage of purchasing energy closer to the time of use is that the 'risk' premium applied by the supplier is minimal i.e. the premium is applied to cover the cost of predicted increases in the commodity (i.e. the wholesale market costs) and non-commodity (the cost of operating and upgrading the transmission and distribution network and a number of additional charges which are levied to ensure security of supply, delivery of affordable energy and to support the Government achieving its carbon budgets and Climate Change Act reduction targets) costs to ensure that the suppliers do not make a loss during the contract period.

The flexible contract does not issue financial penalties (take or pay clauses) as we consume more or less than was specified at the start of the contract. The University's energy consumption is aggregated into the 'basket' any changes in consumption are taken into account through the six monthly re-forecasting process and reflected in the amount of energy purchased for individual members and in aggregate. In the event that there are significant variances within each seasonal period, there are opportunities in a varied aggregated portfolio, to re-allocate energy purchased for another basket member who perhaps does not utilise their full requirement. In this way there is often no requirement for the energy for, say, an additional building to be purchased outside the basket against a perhaps higher market price. In the event that additional volume required was not available from the basket, a specific purchase could be made to cover the new requirement, which would then be included in the next re-forecast.

Electricity

Supplier: EDF

Electricity prices are fixed in seasons (six month summer season, six month winter season) and the energy is purchased ahead of the season, so we will know what the price will be prior to delivery.

Months prior to delivery	0 - 6	6 - 12	12 - 18	18 - 24	24 - 30	30 - 36
Minimum purchase	65%	50%	25%	0%	0%	0%
Maximum purchase	100%	100%	100%	75%	50%	25%

Gas

Supplier: Corona

Gas prices will change monthly. The gas is purchased ahead of consumption as per below, with the remaining 10% purchased at the end of the month:

Months prior to delivery	0 - 6	6 - 12	12 - 18	18 - 24	24 - 30	30 - 36
Minimum purchase	65%	50%	25%	0%	0%	0%
Maximum purchase	90%	90%	90%	75%	50%	25%

A flexible contract will deliver best value, is risk managed and removes the budget re-forecast that can occur at the end of the fixed period.

Fixed Energy Procurement

The University has previously purchased its utilities using a fixed energy procurement model. Within a fixed model a price is agreed for its gas and electricity at a certain time and date (when signatories are available) for future delivery of its contracted energy volumes. The price is then fixed for the duration of the contract. The benefits of a fixed model are peace of mind, higher levels of certainty and budget control.

The disadvantages are the University cannot take advantage of any beneficial market changes, i.e. you are fixed at a set price even if the market price went down which carries the risk of fixing prices at a high market position. In addition, the 'risk' premiums set by the supplier are high to ensure that they do not make a loss over the long contract period. Take or pay clauses are also included within the fixed procurement to ensure that the agreed consumption (give or take a small percentage) specified at the start of the contract is used.

Benefits Statement

TEC analyse all the University's data and provide an annual Members Benefits Statement, which also includes the avoidance of the 'risk' premiums from purchasing flexibly. This is an individual member report that highlights the benefit of using TEC for their utility procurement. The Benefit Statement will be circulated later in the year when it has been published.