



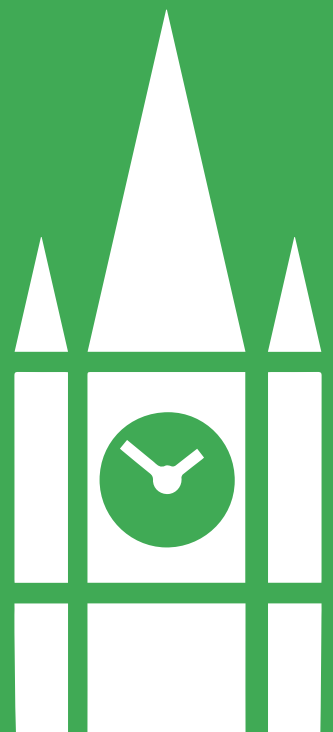
UNIVERSITY OF
LIVERPOOL

SUSTAINABILITY ANNUAL REPORT

2020/21

OUR SUSTAINABLE
UNIVERSITY

BUILDING SUSTAINABILITY
INTO EVERYTHING WE DO





Introduction	3
Our framework	3
Our commitment	4
What's been delivered?	4
Sustainability in a snapshot	5
Sustainability highlights	6
What next?	9
Appendices	10

“ We are committed to social, economic and environmental change at the University ”

CONTENTS

INTRODUCTION



Although 2020 to 2021 has been a year defined by the Covid-19 pandemic, necessitating huge shifts in how we work, how we travel and how we communicate, it has undoubtedly been an exciting year for sustainability at the University of Liverpool.

In May 2020, it was announced that the 26th UN Climate Change Conference of the Parties (COP26) would take place in November 2021, with Glasgow to host. To strengthen access to research, evidence, and academic expertise ahead COP26, the University joined the COP26 Universities Network, a consortium of more than 50 UK Universities, aiming to ensure that the sector plays its part in delivering a successful COP26, getting all players on track to deliver a low-carbon, resilient world.

The UN's International Panel for Climate Change (IPCC) issued a stark warning about the unprecedented changes human actions are having on the planet. Across the institution, academics at the University have been conducting research into how we can limit future climate change. They are providing expert knowledge to develop new materials for energy use and storage, protecting our coasts and informing governments about why our oceans matter in climate negotiations.

With growing momentum for responding to the global challenges of sustainability at the University, we seized the opportunity that came with this raised individual awareness to raise the profile of sustainability across the Institution, seeing a reemphasised focus and drive for sustainability from the Senior Leadership team, across Professional Services, Faculties, and students. Through further changes to the existing sustainability governance structure, the launch of the new Sustainability Strategy and a new look website, there have been more opportunities for staff and students to engage and shape the University's sustainability agenda.

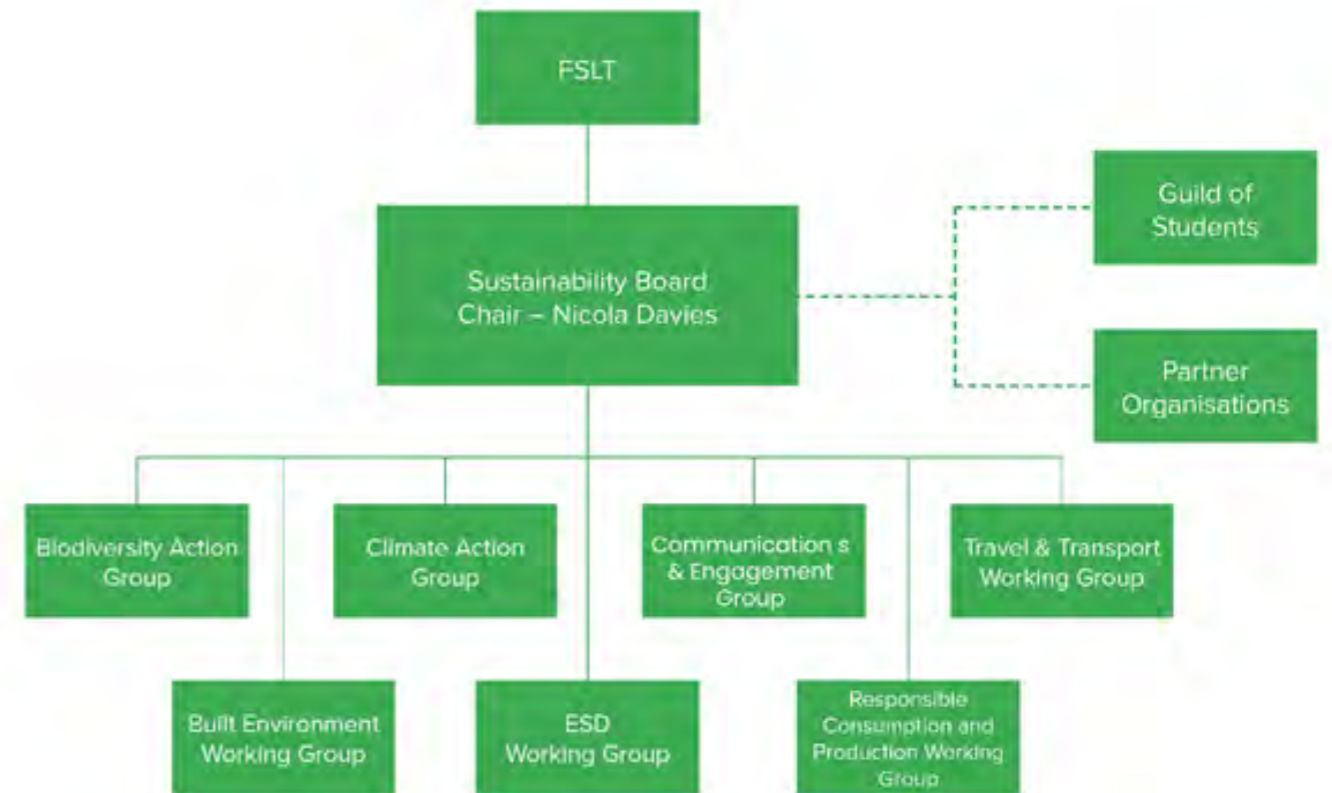
Through collaboration and partnership working, the University has established a framework of policy, strategy and governance which sets the ambitions for delivery high, firmly establishing the University as an anchor Institution across the region and nationwide.

OUR FRAMEWORK

In June 2021, the Strategic Change Department was commissioned by the SLT Lead for Sustainability to oversee the delivery of the new Sustainability Strategy and its key targets.

In January 2020, the University formalised its commitment to the UN SDGs by signing the global higher education sector's SDG Accord in partnership with the Liverpool Guild of Students. By signing the SDG Accord, the University pledged to put the SDGs at the heart of all of its activities. To achieve this, the UN SDGs have been embedded as a unifying framework across the whole of the University.

A new Sustainability Project Team was established to ensure that the University remains on track to achieve the strategy targets, that the action plan is clear and deliverable, and enables broader engagement with the staff and student community. The Project Team will work closely with the Environmental Sustainability Team in FRCS, as well as with other teams and colleagues across the University.



OUR COMMITMENT

This year, the University made a strategic commitment to sustainability, with community at its heart. In line with the principles of the University's Strategy 2026, the Sustainability Strategy states three broad aims for the institution - to achieve net zero carbon by 2035, reduce waste by 50% by 2025 and for every student to undertake a sustainability-related module, extra-curricular activity, or learning as part of their programme.

In January 2020 the University formalised its commitment to the UN SDGs by signing the global higher education sector's SDG Accord in partnership with the Liverpool Guild of Students. By signing the UN SDG Accord, the University demonstrated its commitment to sustainability and builds on existing activities and research and education strengths in this area. The 'Engaging with the United Nations Sustainable Development Goals Report' provides an initial snapshot of where we are now and provides a route map that will guide our progress as we move forward with these commitments. The case studies detailed in this report highlight the difference we are making across the SDG's.



WHAT'S BEING DELIVERED?

Work to deliver the University's commitments on sustainability is led and coordinated by the Environmental Sustainability Team who are responsible for the management of the University's ISO14001 accredited Environmental Management System; ensuring that the University complies with relevant environmental legislation and continually reduces its environmental impacts and improves environmental performance, and the delivery of the Sustainability Strategy, setting out our ambitions and how we will look to achieve them.

The new Sustainability Strategy will be followed by the development of the Sustainability Strategy delivery plan, following a review and prioritisation of sustainability action plans, and embedding a new sustainability governance model to better reflect the current phase of the Strategy's delivery.

The annual report provides a retrospective of our performance over the previous academic year and is a reflection of the University's achievements against the Strategy, actions and targets that were in place at that time. Work in this area is not isolated to the Sustainability Team and valuable contributions to improving the sustainability of the University are made by staff and students from across the Faculties and Professional Services.



Community garden outside the Central Teaching Hub

SUSTAINABILITY IN A SNAPSHOT



<p>Commitment to reduce waste by 50% by 2025</p> 	<p>Submitted to the THE Impact Rankings</p> 	
<p>New Sustainability Strategy working towards a sustainable University</p> 	<p>Hosted virtual Earth Day Summit</p> 	<p>Living Wage Employer</p> 
<p>Largest District Heat Network in Liverpool</p> 	<p>All students have the opportunity to undertake sustainability related learning</p> 	

<p>Hedgehog Friendly Campus Silver Award</p> 	<p>Over 14,000 students engaged with the Sustainability in Action module</p> 	
<p>Commitment to reach Net Zero Carbon by 2035</p> 	<p>Staff support for Education for Sustainable Development</p> 	<p>SDG Student Curriculum audit</p> 
<p>Joined the GOP26 Universities Network</p> 	<p>ISO14001 Accredited Environmental Management System</p> 	
<p>Active travel solutions for staff and students</p> 	<p>Liv to Give <i>Make time, make a difference</i> Staff volunteering framework</p> 	

SUSTAINABILITY HIGHLIGHTS 2020/21

This year has provided the University with the opportunity to utilise the fantastic amount of expertise and energy that exists across our academic, professional service and student community. We have been able to harness the momentum around sustainability at the University by taking advantage of effective digital communications to provide further opportunities for staff and students to engage with the Sustainability Strategy and take part in discussions with colleagues and academics responsible for helping to identify and implement actions to address the 17 UN SDGs. As Covid-19 restrictions eased, there was a real appetite for on-campus activities and we were on hand to engage in person with the university community, once again. Here are some of this year's highlights!

New strategy – working towards a sustainable University

The University is committed to building a more sustainable world for our staff, students, and whole society. Through being responsible custodians of our estate, collaborating with our students, and through harnessing the enthusiasm of our staff, we can ensure the University is net zero carbon by 2035, and meet our wider sustainability ambitions too.

In February 2021, the University launched a new Sustainability Strategy, taking a further step toward achieving our goals and setting out how our whole community can play a part in building a more sustainable future.

In line with the principles of the University's Strategy 2026, the Sustainability Strategy states three broad aims for the institution – to achieve net zero carbon by 2035, reduce our waste by 50% by 2025 and for every student to undertake a sustainability-related module, extra-curricular activity, or learning as part of their programme.

The Sustainability Strategy details seven themed working groups who will identify and implement actions to address these goals.



Hedgehog Friendly Campus silver award

The University has achieved silver accreditation in the Hedgehog Friendly Campus scheme this year.

Hedgehog Friendly Campus is a national accreditation scheme, funded by the British Hedgehog Preservation Society, which aims to make university campuses a safer place for wild hedgehogs. While often considered to be one of the nation's favourite mammals, hedgehogs are in grave need of help. This is reflected in the fact that the International Union for Conservation of Nature (IUCN) added hedgehogs to their Red List last year, highlighting the significant drop in numbers in the UK.

The University's project group comprises of more than 50 members, including staff and students from across all of our campuses, who have undertaken a variety of activities to achieve silver accreditation and are aiming for Gold next year, so watch this space!

University joins COP26 Universities Network

The University recently established the Climate Futures Research Challenge to increase the efforts in tackling climate change and transitioning to a low-carbon future and has joined the COP26 Universities Network, to strengthen access to research, evidence, and academic expertise ahead of the UN COP26 Climate Summit in November 2021. A consortium of more than 50 UK Universities, the network aims to ensure that the sector plays its part in delivering a successful COP26, getting all players on track to deliver a low-carbon, resilient world. The network is working to ensure easier access to evidence and academic expertise relevant to COP26 for government, NGOs, and other actors, and through its own actions.

The UK is a global leader in action on climate change and a considerable contribution stems from work undertaken in universities, in terms of research, training, translation and innovation.

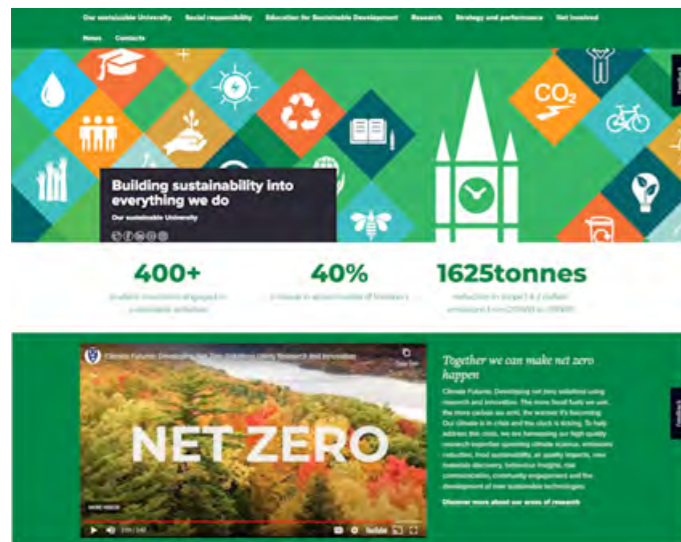
In the build-up to the COP26 Climate Summit, following the example given from France in 2015, a series of publications, events and activities will take place to create momentum, engage public and business audiences, and support the UK Government in its planning. To this end, UK Universities stand ready to collaborate and mobilise their capacities on issues relevant to the meeting and its build-up. The network has connected with Italian higher education counterparts, so that plans are shared between academics across the two countries. The group has met at grass roots academic level since September 2019 to discuss and agree plans for COP26.



Refreshed website launched

With less time spent on campus, an opportunity arose for greater focus on encouraging engagement with sustainability at the University by improving our digital communications.

The University's new Sustainability webpages showcase our commitment to embedding the UN SDGs across the institution, through research, teaching and learning, operations and our community of staff, students and alumni. Based on the objectives outlined in the Sustainability Strategy and using findings from research, user testing and consultation with key stakeholders, the website's appearance, structure, and technology have been transformed and is now compatible with all devices. The new site has a number of improvements, including information from multiple locations has been consolidated enabling visitors to easily navigate often complex information, horizontal navigation has been introduced, making key information easily accessible. High-impact visual designs and refreshed branding have been embedded throughout, making sustainability at the University more visible and easier to recognise. A real-time, social media feed feature has been embedded, enabling the audience to access the latest news and updates at a glance. Exciting video content has been included throughout, to clearly communicate messages and keep visitors engaged and a range of new webpages have been created, including Education for Sustainable Development and how to 'Get Involved'.



Earth Day Summit



Continuing to enhance our digital engagement activities, on Earth Day 2021 (22 April), the Sustainability Team hosted an online event for staff and students to engage with the newly launched Sustainability Strategy.

It was an opportunity for staff and students to take part in an online discussion with university colleagues and academics that represent the 7 themed working groups responsible for helping to identify and implement actions to address the 17 UN SDGs. There were presentations from Syd Cottle, Director of Estates, James Coe, Senior Policy Advisor, Professor Ric Williams from Climate Futures and the Guild of Students, followed by a Q&A panel discussion addressing biodiversity, built environment, climate action, culture and community, responsible consumption and production, education for sustainable development and travel and transport.

Active travel - Cycle to Work Scheme

The University of Liverpool's Cycle to Work Scheme provides staff with the opportunity to sign up for the tax-free bike scheme run in conjunction with our partner Cycle2Work.

The Cycle to Work Scheme is supported by a wide range of specialist bike dealers, catering to everyone regardless of their needs, budget, location, or journey to work. Staff are able to claim the cost of a new bicycle and safety accessories to the value of between £100 and £2,500 from a range of instore and online shops, including independent stores.

Wellbeing Week

Wellbeing Week is a programme of both in-person and virtual activities to help students and staff to boost their health and wellbeing and this year there were more than 50 free sessions and events taking place every day. Some of the programme highlights included the ever-popular Campus 5K, exercise at some of Liverpool's best-known landmarks, gardening sessions at the Guild Walk pocket garden, wellbeing walks, mindfulness, and creative writing sessions.

The Sustainability Team organised for Cheshire Falconry to join us on campus to display a selection of owls, falcons, hawks, and eagles and take questions from staff, students and the local community. Spectators could witness the falconers handling the birds and learn about the fascinating natural lives of a variety of different species and had the opportunity to get hands-on and handle the birds themselves. The birds of prey have been raised by professional falconers to such an expert degree that they really enjoy their interactions with humans.



Wildlife and nature are essential for mental health and wellbeing and the event enhanced and promoted biodiversity and provided a space for both staff and students to engage with nature and the community around campus. It created an open, relaxed, and welcoming environment to experience and learn about birds of prey for a day to remember.



The Wellbeing Week Cycle day, was an opportunity to thank staff and students for choosing cycling as their mode of travel and to promote the Cycle to Work Scheme and bike safety on campus, with Peloton Liverpool who carried out free repairs and maintenance. Campus Support offered free bike registration on the National Cycle Database as well as discounts, giveaways, and lots more. This was followed by a Guided Bike Tour from the expert guide and cycling instructor for a leisurely bike

Times Higher Education Impact Rankings 2021

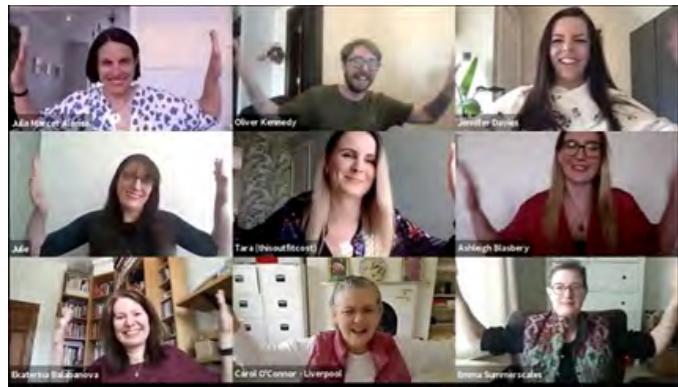


This year, the University was ranked 72nd amongst 1,115 institutions in its first entry into the Times Higher Education Impact Rankings 2021 published on 21 April. With a score of 87.8 of a possible maximum score of 100, the University is within the top 7% globally and is ranked 17th of 50 included in the UK and 8th of 11 in the Russell Group.

Global recognition for student fashion summit

Two University of Liverpool PhD students were named as runners up in the global Principles of Responsible Management Education Awards 2021, in recognition of their innovative Liverpool Fashion Summit programme. Julia Marcet-Alonso and Olly Kennedy received the accolade from PRME, a global scheme that recognises initiatives across the world that promote sustainability linked to the 17 UN SDGs.

Now in its second year, the Liverpool Fashion Summit is a student-led event that aims to tackle the biggest issues in one of the world's largest industries. It provides a platform for businesses, consumers, and academics to debate and discuss fashion industry trends and best practice, raise awareness of the key barriers to change, and to explore the part that everyone can play in making fashion more sustainable.



Race to Zero Pledge

This year, the University has made a pledge to the Race to Zero global campaign which aims to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth. It mobilizes a coalition of leading net zero initiatives, representing 733 cities, 31 regions, 3,067 businesses, 173 of the biggest investors, and 622 Higher Education Institutions. These 'real economy' actors join 120 countries in the largest ever alliance committed to achieving net zero carbon emissions by 2050 at the latest. This commitment will help students, staff and the wider community come together to achieve aspirational levels of climate action.

'Changing Natures' short story competition



This year, a new 1500-word short story competition was launched, looking for submissions on the theme of nature, the environment or 'taking notice' of the world around you, which saw 85 entries.

Winners had their work published as part of The Great Read "Changing Natures" anthology in 2021, as well as receiving a cash prize and an invitation to take part in next year's Liverpool Literary Festival.

The connecting theme of these stories is 'Changing Natures', and this is a collection that challenges us to think in unexpected ways about nature, and about processes of change. The judges of this competition were hugely impressed by the range and quality of the entries. The stories gathered in 'Changing Natures' could scarcely be more diverse in the approaches adopted by the writers, but each tackles the large and challenging questions that drive change.



Student opportunities at the Guild

Student engagement with sustainability through the Guild remains ever popular. The Guild Sustainability Team respond to the interests and concerns of students, by offering events, Give it a Go sessions, volunteering opportunities and support campaigns that explore sustainability and further help students become meaningful and empowered agents of change.

These include bike maintenance sessions, herb pot planting, plant pot painting, mindful study breaks, beekeeping, and instructions to a hedgehog friendly campus.

Working with NUS, the Guild runs an annual Student Switch off project which aims to help students improve energy efficiency, recycling, and other green behavioural changes while students are living in university accommodation. Students can also improve their own environmental impact through programmes such as "Leave Liverpool Tidy" which aims to help students living in halls, and student populated residential areas, to prevent reusable items and food going to waste by setting up donation banks, collection points, volunteer opportunities and events.



Tackling climate change through research and innovation



Beyond the University reaching net zero carbon by 2035 – a commitment that is enshrined in our Sustainability Strategy, universities are uniquely placed to play a crucial role in tackling the climate crisis, providing solutions to specific challenges through research and innovation. To reach net zero carbon, we must harness our research expertise to develop the innovations, technologies and new knowledge that will be needed to meet this whole systems challenge. Through the Climate Futures research theme, researchers are helping to address the climate crisis by harnessing our high-quality research and knowledge leadership. Expertise spans climate science, emissions reduction, food sustainability, air quality impacts, new materials discovery, behavioural insights, risk communication, community engagement and the development of new sustainable technologies.

Working with collaborators across the globe, Climate Futures are aligning these research strengths to explore the impacts of climate change, develop solutions to environmental challenges and address knowledge gaps. The research excellence is delivering tangible impact at the global, national and local scales across climate change mitigation and adaptation, as we work collectively towards a net zero carbon future.

Sustainability in Action online course



Sustainability in Action is a short, new course designed by students for students to introduce the UN SDGs. It formed a component part of a revised 2020/21 Foundation Week of online activities open to new and returning students designed to support students to make connections, create friendships and embrace new opportunities.

As a collaborative project between the University's Careers and Employability Department and Centre for Innovation in Education, the project started with the recruitment of a small team of student interns to develop the course over six weeks in the summer of 2020.

The online course introduces students to the UN SDGs, and how to be more sustainable through fun activities and engaging content and upon successful completion of a series of short assessments, participants are awarded HEAR accreditation. Over the course of the year around 800 students completed the module. In addition, over 3,200 students contributed to the module discussion board, and 5,300 completed at least one of the online quizzes.

Since its implementation, the Sustainability in Action module has won the AGCAS Sustainability Impact Award 2021, was a finalist in the 2021 Green Gown Awards, and was submitted by the University as its institutional case study. The student interns who were involved in developing the module demonstrated creativity, dedication, and energy, and were key to the success of the project. The module will be re-launching in Welcome Week 2021.

San Marcos Sustainable Business Challenge

The San Marcos Sustainable Business online challenge took place during March and April 2021. University of Liverpool students were joined by other students from Peru and China to work in cross-university interdisciplinary teams on a real-world challenge around the theme of sustainable international business. This year the challenge was focused on UN SDGs within the setting of San Marcos, Peru.

All teams had the opportunity to pitch their ideas as part of the San Marcos Sustainability Conference. With an interest in sustainability issues, students were provided with support, including receiving guidance and advice on your proposed solutions from dedicated "Sustainability challenge mentors". The challenge was made up of some live sessions, but students were also required to work with their team to arrange times to meet virtually to collaborate, develop ideas, and create a digital pitch.

Students on the challenge gained experience working on an exciting project which is informed by real-world issues, increased their knowledge of sustainability, and worked as part of a cross-cultural diverse team, sharing inspiring ideas with one another.



SDG curriculum mapping

The Guild are also running their SDG curriculum mapping project with student volunteers which seek to identify links between existing modules and the 17 UN SDGs. Project volunteers look to identify areas of best practice and opportunities for further development of the SDG's in their curriculum. The module audits were completed by July 2020. The mapping and analysis of modules is one of the key sections to enable the University to become a key leader in progressing towards SDGs, as SDG inclusion at a module level will encourage the growth of graduate agents with the ability to create change. Furthermore, SDG engagement is important when demonstrating the impact of research and fostering collaborations, as well as increasing the profile of the University through leadership and contributing to SDG framework through civil engagement.

WHAT NEXT?

2021/22 is about building on last year's achievements and looking at how we can achieve our sustainability aspirations, create a community of sustainability advocates and harness the momentum around sustainability that is already prevalent.

At the University, reducing our energy and associated carbon footprint is vitally important as a key anchor institution for the region and as an educator of the many thousands of students who pass through our doors each year. To be a climate-resilient campus that has minimal negative and maximum positive environmental impact, our ambition is to achieve net zero carbon by 2035, therefore it is vital that the work starts now if we are to be successful at turning our sustainability pledges into action. The only way we can achieve some of our challenging goals is to work together, so as individuals we are asking staff and students to get involved. Throughout 2021/22 there will be a range of forums, events, and activities that will provide the knowledge, skills, and opportunity to make better informed choices.

Through enhanced communications and engagement, we will ensure that all members of the University community are aware of sustainability, our plans and individual responsibilities as well as making sustainability a fundamental part of the staff and student experience. Plans are in place to launch a sustainability newsletter, with opportunities for staff and students to share their news and activities. A delegation from the University will be attending the landmark COP26 summit to observe negotiations, contribute to discussions, present at events, and promote the University's research expertise. Plus, there are proposals to introduce an annual Sustainability Fund to support strategic projects which meet the aims of the Sustainability Strategy or contribute to the UN SDGs through on campus activity or collaborative partnerships.

There's plenty to look forward to and we can't wait to get stuck into the vital work ahead!

Appendix I – Emissions

Types of Emissions Tonnes of carbon equivalent (tCO2e)	Emission Sources		Carbon Emissions
	2018/19	2019/20	2020/21
Gas Used to heat and operate our buildings	33,776 tCO2e	34,958 tCO2e	35,994
Fuels – vehicle fleet (petrol and diesel)	106 tCO2e from Diesel 12 tCO2e from	84 tCO2e total 76 tCO2e from Diesel	76 tCO2e total 69 tCO2e from Diesel 7 tCO2e from Petrol
Electricity Used for lighting, IT equipment, ventilation etc.	0 tCO2e as we generated over 50% of our electricity and the remainder is sourced from 100% renewables sources 7,028 tCO2e when considering the UK electricity grid average carbon intensity	0 tCO2e as we generate over 65% of our electricity and the remainder is sourced from 100% renewables sources 4,247 tCO2e when considering the UK electricity grid average carbon intensity	0 tCO2e as we generate over 65% of our electricity and the remainder is sourced from 100% renewables sources 3,078 tCO2e when considering the UK electricity grid average carbon intensity
Scope 1 Direct emissions from activities – GAS and fuels plus vehicle fleet	33894	35042	36070
Scope 2 Indirect emissions from our electricity use	as per electricity.	as per electricity.	as per electricity.
Scope 3 Water supply and wastewater treatment	332 tCO2 total 110 tCO2e water supply 222 tCO2e wastewater treatment	305 tCO2 total 101 tCO2e water supply 204 tCO2e wastewater treatment	111 tCO2 total 40 tCO2e water supply 71 tCO2e wastewater treatment
Scope 3 Indirect emissions associated with our supply chain Emissions measured	Water consumed Waste generated • On campus Business travel Air and rail booked through Key Travel		
Emissions not yet measured and reported	Waste generated • Construction projects Business travel • All other eg expenses, taxis Staff travel Commuting to campus Student travel commuting to campus Procurement of goods and services (including construction projects)		



Appendix 2– Key Performance Indicators

Performance Measure	Key Performance Indicator	Target	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	% change from previous year	Direction of change	% change from baseline	Direction of change
Greenhouse Gas Emissions													
Reduce scope 1 & 2 carbon emissions	Total scope 1 & 2 emissions (tonnes)	Net zero by 2035	43,044	41,951	46,212	43,024	40,804	39,272	35,994	8%	↓	16%	↓
Reduce scope 3 carbon emissions	Total scope 3 carbon emissions from waste, water, business travel, staff commutes and procurement (tonnes)		1,311,908	1,252,854	1,207,817	1,254,650	1,263,782	1,173,653	37,956	97%	↓	97%	↓
Number of reportable pollution incidents to air, land and water	Number of pollution incidents	Zero					1		0	-	→	-	→
Resource Consumption & Protection													
Resource Consumption													
To reduce the consumption of natural resources for energy use	Total energy consumption – heat & kWh		267,415,217	130,845,332	154,590,717	134,893,401	151,819,399	87,178,404	88,042,538	1%	↓	26%	↓
	Total energy consumption – electricity (kWh)			98,026,642	82,204,925	77,284,929	71,370,441	66,464,424	68,771,207	1%	↓	25%	↓
	% total energy generated by renewable sources	>25%	61%	27%	46%	55%	49%	60%	56%	5%	↓	25%	↓
	% electricity generated from onsite PV			0.10%	0.11%	0.10%	0.14%	0.09%	0.01%	0.8%	↑	10%	↑
To reduce the consumption of natural resources for water use	Total water consumption (m³)		308,423	300,565	326,914	321,425	319,342	294,054	365,481	10%	↓	20%	↓
To reduce the amount of waste generated	Waste mass generated (tonnes)	50% reduction by 2025	3,875	3,277	3,313	3,309	3,374	3,429	1,712	50%	↓	54%	↓
To send as much hazardous waste to landfill	Percentage of waste sent to landfill	100%	100%	100%	100%	100%	100%	100%	100%	-	→	-	→
To send zero construction waste to landfill	Percentage of waste sent to landfill	100%	100%	100%	100%	100%	100%	100%	100%	-	→	-	→
To increase the amount of non-hazardous waste recycled	Percentage of waste recycled	>90%	93%	91%	91%	91%	91%	91%	91%	-	→	2%	↑
Procurement and Supplier Engagement													
Improve sustainable procurement practice	Level achieved on the net positive waste framework	Level 4		Level 3	Level 3	Level 3	Level 3	Level 3	Level 3	-	→	-	→
	Modern slavery statement available	Publicly available online						Yes	Yes	-	→	N/A	N/A
	Certification to sustainability standards	Accreditation to more than 2 sustainability standards					1 (Electronic Watch)	1 (Electronic Watch)	2 (ISO 14001)	1%	↑	N/A	N/A
Land Use & Biodiversity													
Biodiversity													
Improve biological value of the whole green space	Net biological value							2		2%	↓	N/A	N/A
	Number of trees on main campus										PROPOSED		
	Green accreditation – hedgerow friendly campus	Green accreditation by 2022						Bronze	Bronze	-	→	N/A	N/A
Buildings & Space													
The percentage of new buildings that are certified at least BREEAM Excellent or equivalent (E)											PROPOSED		
The percentage of buildings with a Display Energy Certificate that have a minimum rating of 'D' (E)											PROPOSED		
External awards for sustainable construction/building											PROPOSED		
Travel and Transport													
Staff Commute													
Reduce number of single occupancy vehicles (SOV)	Percentage SOV rate	25% by 2023	31%	31%	31%	30%	30%	30%	37%	1.6%	↑	21.3%	↓
Increase staff journeys made by public transport	Percentage of public transport use	44% by 2023	34%	38%	34%	38%	39%	39%	40%	2.3%	↑	13%	↓
Increase staff journeys made by active travel modes (cycling & walking)	Percentage of active travel mode	20% by 2023	14%	19%	19%	14%	14%	14%	14%	-	→	24%	↓
Number of EV charging points									0	-	→	N/A	N/A
Beet Vehicles													
Increase the number of electric vehicles (EV) in the university's car fleet	Number of EV vehicles								2	2.0%	↑	N/A	N/A
Environmental Management System													
Environmental Management System External Verification	External certification	ISO14001				ISO14001	ISO14001	ISO14001	ISO14001	-	→	-	→
Determine and understand the university's environmental compliance obligations and evaluate our compliance status	Number of major non-conformances due to breach in compliance obligations	Zero							1	1%	↓	N/A	N/A
Respond to freedom of information requests	Number of freedom of information requests answered							6	7	16.7%	↑	N/A	N/A
Sustainable Finance													
Adhere to the commitments in the University's Ethical Investment Policy	Compliance with the University's Ethical Investment Policy	Majority compliance					compliant	compliant	compliant	-	→	-	→

Performance Measure	Key Performance Indicator	Target	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	% change from previous year	Direction of change	% change from baseline	Direction of change
Divest from fossil fuels	University committed to divest from fossil fuels	Full divestment by July 2022								N/A	↑	-	→
Education for Sustainable Development													
Every student will have the opportunity to undertake a sustainable learning activity	Number of students voluntarily undertaking sustainability related activities								2,488	100.0%	↑	N/A	N/A
	Number of students completing Sustainability in Action module								700	100.0%	↑	N/A	N/A
	Percentage of returning students that perceive they are gaining the skills and knowledge that are helping them understand the global sustainability issues									94%	100.0%	↑	N/A
Staff will have the opportunity to improve skills and understanding of environmental sustainability	Number of staff undertaking EIMA Environmental Awareness training										PROPOSED		
	Percentage of staff who feel that the university has provided professional development opportunities that increase awareness and understanding of environmental sustainability										PROPOSED		
Global Impact													
Improve university's contribution to the UN SDGs	THE Impact Ranking Score SDG 1								71.8	76.4	6.3%	↑	
	THE Impact Ranking Score SDG 2								48.8		N/A		
	THE Impact Ranking Score SDG 3								70.1		N/A		
	THE Impact Ranking Score SDG 4								47.3		N/A		
	THE Impact Ranking Score SDG 5								50.2		N/A		
	THE Impact Ranking Score SDG 6								60.2		N/A		
	THE Impact Ranking Score SDG 7								55.5		N/A		
	THE Impact Ranking Score SDG 8								47.8		N/A		
	THE Impact Ranking Score SDG 9								60.3		N/A		
	THE Impact Ranking Score SDG 10								70.7	80.1	13.3%	↑	
	THE Impact Ranking Score SDG 11								73.8	71.5	3.2%	↓	
	THE Impact Ranking Score SDG 12								82.5	77.5	6.5%	↓	
	THE Impact Ranking Score SDG 13								61.4		N/A		
	THE Impact Ranking Score SDG 14								58.6		N/A		
	THE Impact Ranking Score SDG 15								84.8	78.9	7.5%	↓	
	THE Impact Ranking Score SDG 16								73.8	90.2	18.2%	↑	
	THE Impact Ranking Score SDG 17								94.4	100	5.4%	↑	

Appendix 3 – Performance Data 2014/15 to 2020/21

	2016/17	2017/18	2018/19	2019/20	2020/21
Finances & People					
Total staff FTE	5215	5370	5490	5695	5,548
Teaching Student FTE	21130	23285	23915	24255	23,678
Research Student FTE	1585	1585	1665	1885	1,993
Buildings & Spaces					
Number of buildings	213	217	217	217	216
Total site area (ha)	247	247	247	247	247
Total grounds area (ha)	83	83	83	83	83
Total grounds are water (ha)	1	1	1	1	1
Total playing fields area (ha)	19	19	19	19	19
Gross Internal Area (m2)	474,206	490,206	488,867	497,985	489,852
Non residential Gross Internal Area in DEC or EPC Category A (m2)	45,247	42,871	29,492	10,543	36,389
Non residential Gross Internal Area in DEC or EPC Category B (m2)	42,366	37,376	32,920	119,391	151,711
Non residential Gross Internal Area in DEC or EPC Category C (m2)	186,251	108,126	133,179	135,929	124,322
Non residential Gross Internal Area in DEC or EPC Category D (m2)	65,208	119,839	46,349	50,921	9,501
Non residential Gross Internal Area in DEC or EPC Category E (m2)	-	33,987	64,066	22,517	10,597
Non residential Gross Internal Area in DEC or EPC Category F (m2)	4,514	-	17,964	6,097	6,097
Non residential Gross Internal Area in DEC or EPC Category G (m2)	10,741	13,611	27,903	13,974	13,974
Residential Gross Internal Area in DEC or EPC Category A (m2)	69,881	67,383	35,674	69,162	51,032
Residential Gross Internal Area in DEC or EPC Category B (m2)	5,613	30,494	53,926	50,997	39,127
Residential Gross Internal Area in DEC or EPC Category C (m2)	-	-	-	-	-
Residential Gross Internal Area in DEC or EPC Category D (m2)	12,286	16,845	-	-	-
Residential Gross Internal Area in DEC or EPC Category E (m2)	2,922	-	-	-	-
Residential Gross Internal Area in DEC or EPC Category F (m2)	10,681	3,458	-	-	-
Residential Gross Internal Area in DEC or EPC Category G (m2)	18,243	-	-	-	-
Energy					
Total Energy consumption (kWh)	236,895,642	206,178,530	223,189,858	153,661,828	168,708,779
Natural Gas - excluding CHP (kWh)	66,806,611	55,780,046	73,522,154	14,310,607	14,627,613
Natural Gas - CHP (kWh)	135,315,098	145,718,448	109,550,047	175,214,167	181,889,843
Grid Electricity (kWh)	25,277,855	20,668,543	27,495,426	18,611,443	14,494,375
Heat from CHP (kWh)	87,784,106	79,113,555	78,297,243	72,864,797	88,062,538
Electricity from CHP (kWh)	56,933,873	50,545,029	43,771,916	47,816,843	51,516,962
Total energy generated by onsite CHP (kWh)	141,181,133	145,179,821	128,982,077	134,645,561	139,579,501
Onsite PV (kWh)	93,197	71,358	103,119	58,138	7,921
Fuel used in university owned vehicles - diesel (l)	36,641	37,521	40,978	30,498	27,390
Fuel used in university owned vehicles - petrol (l)	3,398	3,363	5,298	3,507	3,306
Total water consumption (m3)	320,914	321,628	319,348	294,056	265,681

	2016/17	2017/18	2018/19	2019/20	2020/21
Total water supply grey water and rain water (m3)	-	-	-	-	-
Total water borehole extraction (m3)	-	-	-	-	-
Borehole water used for irrigation (%)	-	-	-	-	-
Emissions and waste					
Total Scope 1 & 2 carbon emissions (kgco2e)	46,212,159	43,024,282	40,803,660	39,272,244	39,147,791
Scope 1 & 2 carbon emissions - natural gas (kgco2e)	37,222,734	37,067,663	33,657,824	34,847,920	35,994,137
Scope 1 & 2 carbon emissions - grid electricity (kgco2e)	8,886,683	5,850,645	7,027,831	4,339,072	3,077,591
Scope 1 & 2 carbon emissions - vehicle diesel (kgco2e)	95,272	98,565	106,301	77,649	68,813
Scope 1 & 2 carbon emissions - vehicle petrol (kgco2e)	7,470	7,409	11,703	7,603	7,251
Scope 3 carbon emissions - business travel - air (tCO2e)	1,708	1,702	1,702	1,250	-
Scope 3 carbon emissions - business travel - rail (tCO2e)	53	53	53	50	-
Scope 3 carbon emissions - business travel - grey fleet (tCO2e)	149	150	150	150	-
Scope 3 carbon emissions - staff commute rail (tCO2e)	139,991	139,991	139,991	140,000	-
Scope 3 carbon emissions - staff commute bus (tCO2e)	89,405	89,405	89,405	9,000	-
Scope 3 carbon emissions - staff commute car (tCO2e)	908,230	908,230	908,230	910,000	-
Scope 3 carbon emissions - staff commute taxi (tCO2e)	277	277	277	280	-
Scope 3 carbon emissions - staff commute motorcycle (tCO2e)	8,604	8,604	8,604	8,650	-
Total scope 3 carbon emissions - waste (tco2e)	3,942	3,942	3,942	3,940	72.86
Total scope 3 carbon emissions - water supply (tco2e)	110	111	110	101	40
Total scope 3 carbon emissions - wastewater treatment (tco2e)	228	230	222	204	71
Scope 3 carbon emissions - supply chain - business services (tco2e)	18,655	17,013	15,766	12,495	8,325
Scope 3 carbon emissions - supply chain - paper products (tco2e)	2,342	1,831	1,412	1,104	1,175
Scope 3 carbon emissions - supply chain - other manufactured products (tco2e)	12,577	20,829	2,961	2,435	6,300
Scope 3 carbon emissions - supply chain - manufactured fuels, chemicals and gases (tco2e)	2,307	3,060	235	244	1,150
Scope 3 carbon emissions - supply chain - food and catering (tco2e)	3,993	11,768	635	708	2,000
Scope 3 carbon emissions - supply chain - construction (tco2e)	12,311	12,192	15,009	4,039	6,150
Scope 3 carbon emissions - supply chain - ICT (tco2e)	1,503	7,802	25,483	21,020	750
Scope 3 carbon emissions - supply chain - waste and water (tco2e)	-	2,794	-	-	1,225

	2016/17	2017/18	2018/19	2019/20	2020/21
Scope 3 carbon emissions - supply chain - medical and precision instruments (tco2e)	8,277	6,679	66,271	55,879	4,150
Scope 3 carbon emissions - supply chain - other procurement (tco2e)	11,830	12,909	2,588	1,722	5,925
Scope 3 carbon emissions - supply chain - unclassified (tco2e)	1,325	4,479	737	381	652
Total hazardous waste (tonnes)	241	241	241	241	241
Total waste mass (tonnes)	3,315	3,359	3,374	3,425	1,712
Total waste mass - recycled (tonnes)	1,016	1,030	1,040	1,050	525
Total waste mass - used to create energy (tonnes)	2,299	2,329	2,335	2,375	1,187
Other works waste mass - total (tonnes)	1,400	1,400	1,400	1,425	712
Other works waste mass - recycled (tonnes)	525	525	525	550	275
Other works waste mass - used to create energy (tonnes)	875	875	874	875	437
Total volume of wastewater (m3)	322,382	325,305	312,961	288,176	260,367
Transport and Environment					
Percentage modal split for commuting by staff single occupancy car journey (%)	31	38	38	38	37
Percentage modal split for commuting by staff car share (%)	14	8	8	8	8
Percentage modal split for commuting by staff bus (%)	12	14	14	14	15
Percentage modal split for commuting by staff train (%)	24	25	25	25	25
Percentage modal split for commuting by staff cycle (%)	9	7	7	7	7
Percentage modal split for commuting by staff walk (%)	10	7	7	7	7
Percentage modal split for commuting by staff motorbike (%)	1	1	1	1	1
Percentage modal split for commuting by staff other (%)	-	1	1	1	0.0
Number of car parking spaces	1,867	1,900	1,890	1,890	1,890
Number of electric charging bays	-	-	-	-	-
Number of cycle spaces	713	745	755	755	755
EMS external verification	-	ISO14001	ISO14001	ISO14001	ISO14001
Fairtrade accreditation	yes	yes	working towards	working towards	no

Non Residential Information					
	2016/17	2017/18	2018/19	2019/20	2020/21
Non residential energy consumption (kWh)	210,180,620	177,556,385	195,661,371	138,204,903	149,651,465
Non residential water consumption (m3)	209,081	185,303	189,927	185,127	156,587
Non residential volume of wastewater (m3)	209,813	213,416	186,129	181,425	153,455
Non residential waste mass - total (tonnes)	1,159	1,189	1,195	1,200	600
Non residential waste mass - recycled (tonnes)	344	351	355	350	175
Non residential waste mass - used to create energy (tonnes)	815	838	840	850	425
Non residential scope 1 & 2 carbon emissions (kgco2e)	39,457,974	38,415,050	36,199,925	35,094,874	32,483,939
Non residential scope 3 carbon emissions - water supply (tco2e)	72	64	65	64	23
Non residential scope 3 carbon emissions - waste (tco2e)	23,856	23,856	23,856	2,385	1,193

Residential Information					
	2016/17	2017/18	2018/19	2019/20	2020/21
Residential energy consumption (kWh)	26,715,022	28,622,145	27,528,487	15,456,925	19,057,314
Residential water consumption (m3)	111,833	136,325	129,421	108,929	109,094
Residential volume of wastewater (m3)	112,569	111,889	126,832	106,751.00	106,912
Residential waste mass - total (tonnes)	756	770	780	800	400
Residential waste mass - recycled (tonnes)	147	154	160	150	75
Residential waste mass - used to create energy (tonnes)	609	616	620	650	325
Residential scope 1 & 2 carbon emissions (kgco2e)	6,651,443	4,503,258	4,485,730	4,092,118	4,413,536
Residential scope 3 carbon emissions - water supply (tco2e)	38	47	45	37	16
Residential scope 3 carbon emissions - waste (tCO2e)	15,561	15,561	15,561	1,555	753

GET INVOLVED

Everyone can make a difference through sustainability at the University of Liverpool.

We want to hear your feedback and ideas to help us continue to work towards our vision of a sustainable university.

What do you think of this year's report?

Do you have an idea for a sustainable research project, activity, or event?

Is there something we are not doing that you want to share?

Get in touch with the sustainability team, we would love to hear from you:

sustainability@liverpool.ac.uk

liverpool.ac.uk/sustainability



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