



University of
Sunderland

ENVIRONMENTAL SUSTAINABILITY PLAN 2025





WE ARE A LIFE-CHANGING UNIVERSITY

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STRATEGIC PLAN

THE UNIVERSITY'S
STRATEGIC PLAN
SETS OUT OUR
PURPOSE
AND **AMBITIONS**
WE ARE A
LIFE-CHANGING
UNIVERSITY



OUR VALUES GUIDE OUR BEHAVIOURS



INSPIRING –
we provide a supportive, empowering and enriching experience for our staff and students



INNOVATIVE –
we value people for their creativity and update our knowledge and practice to enhance the student experience



COLLABORATIVE –
we work together as a community with our partners and build lasting relationships to achieve our shared ambitions



INCLUSIVE –
we celebrate our diverse culture, which welcomes and values everyone's contribution



SEEKING EXCELLENCE –
we strive for the highest quality in academic delivery, research and service standards

This Environmental Sustainability Plan to 2025 sets out what we will do to achieve our ambitions and how we will measure our performance.



SCOPE

This plan is one of several key supporting plans for the University which, together, will deliver our ambitions. It covers the University's activities within the UK initially, and then overseas as our sustainability plans and processes

develop. This plan outlines the University of Sunderland's intent to reduce its direct and indirect environmental impacts and contribute to sustainable development for the local community and wider society.





MEASURING PERFORMANCE

This plan will seek to achieve or support those annual key performance indicators that are agreed under the following areas of environmental sustainability:

Environmental Sustainability Themes	
Energy, Water and Carbon Reduction in Buildings	Biodiversity
Waste Management, Pollution Prevention and Environmental Compliance	Sustainable Travel
Sustainable Procurement	Sustainability Education

Figure 1- The Six Themes of the University of Sunderland's Environmental Sustainability Plan

University of Sunderland's key aims to improve environmental sustainability

We aim to achieve the following key measurable improvements in sustainability by 2025, spanning all six of the sustainability themes shown in Figure 1. By implementing the actions described in this plan, we will:

1. Reduce carbon emissions arising from energy use in our buildings
2. Increase the proportion of our heat and power derived from renewable sources
3. Reduce our water use
4. Improve the biodiversity value of our estate and local area
5. Reduce non-recyclable waste and prevent harmful discharges to air, land and water
6. Reduce the environmental impacts of our fleet, business travel and commuting by our staff and students
7. Reduce indirect supply chain emissions from procurement of goods and services, including areas such as sustainable food and construction
8. Increase the proportion of the student curriculum which is related to the United Nations Sustainable Development Goals (UN SDGs)
9. Increase the provision of opportunities for additional learning and engagement in sustainability projects for students and staff
10. Increase our ratings against the Sustainability Leadership Scorecard for internal engagement and communications, with a focus on demonstrating leadership in sustainability
11. Increase our ratings against the Sustainability Leadership Scorecard for external engagement and communications, with a focus on partnership working and sharing best practice
12. Implement robust measurement and verification (M&V) for each theme to monitor performance and increase the credibility of reporting.

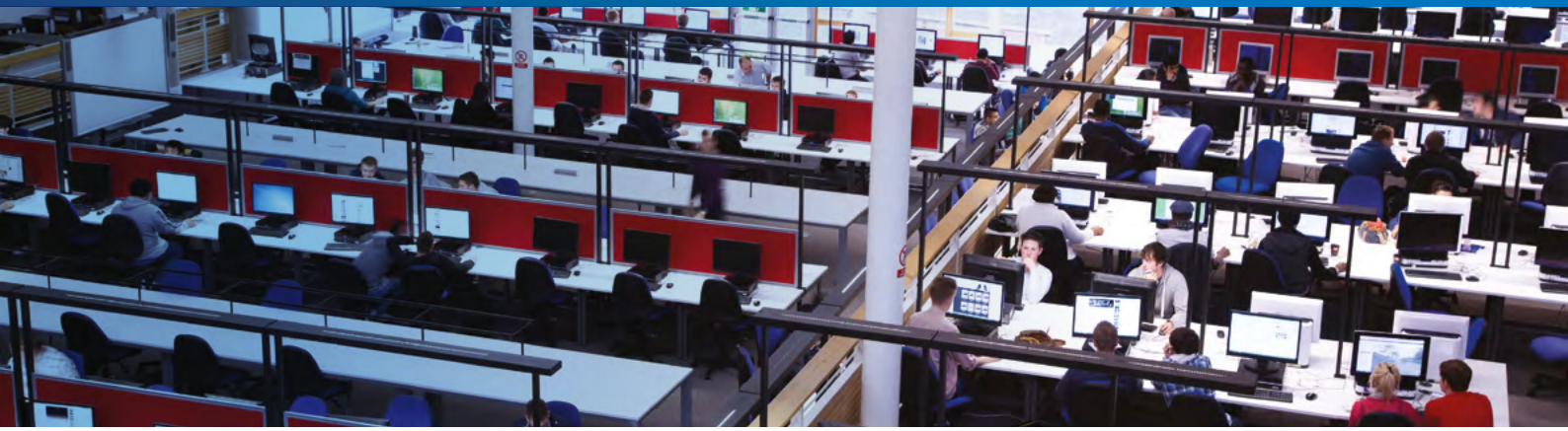
This plan serves as a high-level overview of how we intend to achieve our aims over the next five years. Key aims and performance measures for each of the six themes are outlined throughout this report. Detailed targets and strategies to support the delivery of this plan will be developed and refined for each of the six sustainability themes by the operational groups as our plans progress. The initial programme/ action plan to 2025 is included in **APPENDIX C**.



STRATEGIC RISKS

This Plan will seek to reduce, mitigate or control the following strategic risks:

- Low levels of commitment and/or achievement in sustainability improvements by the University could incur reputational risk and potentially impact student recruitment. Sustainability and climate change will affect young people more than any other section of society, and many current and prospective students have a considerable and active interest in these areas. Evidence compiled by NUS – National Union of Students – suggests that the sustainability performance of their chosen University is important to students and it has therefore become an established key priority across the higher education (HE) sector.
- Failure to reduce our exposure to the financial effects of future carbon taxation, energy price inflation and carbon offsetting costs through the implementation of this plan, and supporting carbon reduction plans, could impact financial sustainability in the future.
- Climate change could introduce increased risks of flooding, overheating and property damage. Both adaptation and mitigation strategies are required to manage risk.
- This plan aligns with a previously identified strategic risk (SR8) that we fail to plan, invest and maintain the University's physical estate to ensure that its size, shape and structure are aligned to the University's strategic ambitions, is environmentally sustainable and compliant with relevant health and safety legislation.



ENVIRONMENTAL SUSTAINABILITY PLAN

INTRODUCTION

This plan sets out the University of Sunderland's strategic response to the threat of climate change, one of the most significant global challenges of our time. Impacts of climate change include habitat loss, species extinction and food shortages, with forest fires, flooding and extreme weather events becoming more frequent, posing increasing risk to life as well as property damage. We are already observing unprecedented climate related events, and 19 of the 20 warmest years since records began have already been measured in this millennium.

The UK government was the first major economy to legislate for zero-carbon, and in 2019 increased its ambition from the 80% carbon reduction target in the original Climate Change Act 2008, to a legally binding zero carbon commitment for all emissions scopes and sectors by 2050. Emissions scopes and definitions are summarised in **APPENDIX A**.

The UK government strengthened its position in alignment with the 'Paris Agreement', a signed commitment made in 2015 by global leaders at the UNFCCC (United Nations Framework Convention on Climate Change) COP 21 Summit to take action to limit average temperature increases to 2 °C above pre-industrial levels, and preferably 1.5 °C. The IPCC (Intergovernmental Panel on Climate Change) declared that although this would require "unprecedented transitions in all aspects of society", it would significantly reduce climate related impacts. The predicted differences between the 1.5 °C and

2 °C scenarios are stark, yet some projections suggest an increase exceeding 4 °C without urgent action being taken.

As the scientific body of knowledge advances and is being more widely reported, public awareness continues to grow, with individuals increasingly taking action to reduce their own impacts, with widespread and collective environmental activism increasingly demanding action from governments and organisations.

Inequality is an inherent characteristic of climate change, with local impacts and resilience to them depending on a number of social, economic and geographical factors. Overall however, young people will be impacted most by climate change and should be at the centre of all sustainability planning.

Young people are already at the forefront of environmental activism, and NUS research suggests that the sustainability performance of their university is of great concern to students. As a result, sustainability has been an increasingly major focus across the HE sector. In addition to reducing our own environmental impacts, the University of Sunderland intends to magnify its efforts by providing opportunities for students to engage with sustainability issues either via the curriculum or through extra-curricular opportunities to equip them with the inspiration, knowledge, skills and attributes to thrive in a low carbon future.

Our strategic approach to environmental sustainability involves dividing this broad and diverse challenge into six measurable themes, each with an operational group, all overseen by the Strategic Environmental Sustainability Group. Each operational group will be responsible for developing and delivering a strategy to improve our performance against each theme, including targets and relevant measures.

The Strategic Environmental Sustainability Group provides the strategic governance and co-ordinates the development and delivery of sustainability plans. Chaired by the Chief Operating Officer and with membership representation from across the University, including the Students' Union, professional services and academic staff, it has sufficient authority to ensure that appropriate policies, resources and expertise are in place to achieve our aims. It will also play a central role in facilitating internal and

external communications, engagement plans and developing community and business partnerships around sustainability. Collaboration with Sunderland City Council as a key partner in plans for Sunderland to become a carbon-neutral city by 2030 is an important aspect of our sustainability planning and carbon accounting.

Measuring and understanding our environmental impacts is the first stage of being able to manage them and to demonstrate improvement. Measurements of direct Scope 1 and 2 emissions are generally well established and robust. Measurement of some sources are a work in progress, especially those indirect Scope 3 emissions related to travel and supply chain. However, we are fully committed to identifying and implementing measures to reduce our environmental impacts while continuously improving our measurement, verification and reporting strategies throughout the duration of this plan.



IMPACTS OF COVID-19 ON CARBON EMISSIONS MEASUREMENT

Effects of the COVID-19 pandemic have impacted carbon emissions substantially, mainly due to reduced building occupancy and reduced travel. Some reductions in Scope 1 and 2 emissions will have been offset by an increase in domestic energy use to support home-working. We will aim to estimate this impact when sufficient data is available. As a result, the baseline year against which performance

is measured will generally be 2018-19, as the most recent uninterrupted operational year. It is anticipated that some of the positive changes can be sustained, with flexible working, the Student First strategy and hybrid delivery models for teaching all expected to continue to reduce building occupancy and staff and student commuting, for example.

SUSTAINABILITY THEME 1

ENERGY, WATER AND CARBON REDUCTION IN BUILDINGS

Energy used in buildings accounts for 99% of our direct Scope 1 and 2 carbon emissions. Improving energy efficiency and increasing renewable energy generation across the estate will therefore continue to be a priority area. A new Carbon Management Plan is being developed to support this plan, underpinned by a 10-year carbon management programme outlining how the University will make the estate more energy efficient and adopt low carbon energy sources.

The majority of our buildings are expected to be in use in 2050 and energy demand reduction through retrofitting energy conservation measures will be the primary approach to making our buildings more sustainable. We will also progress further opportunities to generate our own renewable heat and electricity. With demand reduced and an increasing proportion of energy being self-generated, opportunities to source electricity which can be traceably linked to renewable sources and backed by Renewable Energy Guarantees of Origin (REGO) are being pursued.

A grant-funded Heat Decarbonisation Plan is in development to manage the necessary transition from natural gas to decarbonised heat sources across the estate, which will involve major investment in building fabric improvements and adaptations to mechanical and electrical infrastructure over the long-term. Opportunities to connect to a potential city-wide low carbon heat network are also being investigated in collaboration with Sunderland City Council.

Reducing energy use in buildings is not solely a technical challenge. The way they are used by staff and students is also a significant driver of energy and water use in buildings. Wider strategies to educate and encourage staff and students to act more sustainably should also help to ensure that our increasingly efficient buildings are used in an efficient way.

Our primary measurable aims for **Sustainability Theme 1 – Energy, Water and Carbon Reduction in Buildings** are summarised below.

We will:

- **reduce total energy related carbon emissions from all University owned/occupied buildings;**
- **reduce water related carbon emissions from all University owned/occupied buildings;**
- **increase the proportion of electrical energy demand generated from renewable sources; and**
- **increase the proportion of thermal energy demand generated from renewable sources**

A detailed strategy to achieve these aims will be included in the forthcoming Carbon Management Plan and associated carbon management programme, developed by the Estates and Facilities Directorate.

Our key actions to improve our performance against **Sustainability Theme 1 – Energy, Water and Carbon Reduction in Buildings** are listed below.

We will:

- **develop and adopt the Carbon Management Plan and carbon management programme to 2030;**
- **develop a Heat Decarbonisation Plan to adapt buildings for the phase out of gas boilers with decarbonised heat sources over the next ten years;**
- **implement further renewable electricity generation projects on Sciences, Murray Library, St Peters Gate, David Goldman, Wearside View and Prospect buildings;**
- **expand schemes to replace fluorescent lighting with LED technology and automatic controls across the estate;**
- **investigate alternative procurement and delivery methods for whole-building energy retrofits (energy performance contracts, Re:fit etc.) to achieve large scale carbon reductions from existing buildings; and**
- **implement ISO 50001 Energy Management Standard with external verification.**

An action plan and outline programme for this theme is included in **APPENDIX C**.

SUSTAINABILITY THEME 2

BIODIVERSITY

Enhancing biodiversity across the University estate is an important aspect of our overall sustainability strategy, despite modest impacts on emissions. Protecting local wildlife and their habitats, enhancing the amenity value for staff, students, visitors and the local community will serve as one of the most visual indicators of the University's commitment to sustainability.

As a city-centre based campus with relatively small amounts of green space, maximising the biodiversity value of existing areas will be the main challenge. Collaborating on wider off-campus projects in the local community will help increase our impact further and also offer additional opportunities for students and staff to get involved in sustainability projects.

Current work includes sustainable horticulture methods, ongoing protection of wildlife (such as the recent award from the British Hedgehog Preservation Society), and areas of campus reserved for protection of wild flowers. A significant example of the University's commitment to biodiversity is the allocation of an area of land from a recently demolished building for development as a garden with high biodiversity and amenity value.

Our primary measurable aims related to achieving improvements in **Sustainability Theme 2 – Biodiversity** are summarised below.

We will:

- **increase the total area (m²) of the University estate with a high biodiversity value;**
- **obtain independent, external verification of contribution to biodiversity, wildlife and other nature protection; and**
- **increase time spent by staff and students on internal or external biodiversity related projects**

A detailed strategy to achieve these aims will be incorporated in the development of the forthcoming Biodiversity Plan by the Estates and Facilities Directorate and the biodiversity operational group. Our key actions to improve our performance against **Sustainability Theme 2 – Biodiversity** are listed below.

We will:

- **develop a full biodiversity strategy for the University; estate, including visual, amenity, sequestration and wildlife protection objectives**
- **attain further external verification of biodiversity improvement e.g. Hedgehog Preservation Society;**
- **implement a volunteer scheme to encourage staff and students to contribute to biodiversity improvement projects on campus and in the community;**
- **develop a scheme to encourage bids for biodiversity project funding from staff and students; and**
- **align policies to prioritise biodiversity in estate planning and new-build and refurbishment projects.**

An action plan and outline programme for this theme is included in **APPENDIX C**.



SUSTAINABILITY THEME 3

WASTE MANAGEMENT, POLLUTION PREVENTION AND ENVIRONMENTAL COMPLIANCE

For many years, the University has operated a formal Environmental Management System, developed and maintained by the Health, Safety and Environment (HS&E) team to reduce environmental impacts and ensure compliance with statutory local and national requirements. With documented processes and regular reviews of performance against those processes, non-conformances are logged and reported at a senior level. Action is taken to improve processes and procedures where necessary.

This theme of the plan is concerned with reducing the environmental impacts of waste and preventing harmful local discharges to air, water and land. This includes releases of gases with high global warming potential, such as refrigerants, releases of toxic substances into sewers and water courses and disposal of solid waste from packaging, catering and construction activities, for example. Efforts to quantify impacts in terms of carbon have shown that waste is a minor proportion of indirect Scope 3 emissions. However, this does not capture the longer-term environmental effects of waste streams which are not controlled.

Progress against this sustainability theme is not limited to internal management systems or complying with statutory requirements. As with energy and water use, staff and students can help to improve performance by, for example, increasing recycling or avoiding the use of single-use plastics.

Efforts to encourage and educate students to work with the systems put in place to reduce environmental impacts will be an important area of our wider engagement strategies. This area of sustainability is also likely to offer significant potential for staff and student involvement in improvement initiatives and engagement activities.

Our primary measurable aims related to achieving improvements in ***Sustainability Theme 3 - Waste Management, Pollution Prevention and Environmental Compliance*** are summarised below.

We will:

- **reduce total greenhouse gas emissions from waste and refrigerant gases;**
- **reduce total mass of waste generated;**
- **reduce waste sent to landfill (zero target);**
- **increase non-recyclable waste used for energy generation; and**
- **increase proportion of total waste which is recycled or reused; and**
- **minimise number of EMS non-compliances (zero target)**

A detailed strategy to achieve these aims will be developed by HS&E in conjunction with the relevant operational group. Our key actions to improve our performance against ***Sustainability Theme 3 – Waste Management, Pollution Prevention and Environmental Compliance*** are listed below.

We will:

- **align the Environmental Management System (EMS) to externally verified ISO14001 standard;**
- **develop a waste management strategy to include behavioural, procurement and processing aspects, in line with the waste hierarchy;**
- **identify older refrigerant based mechanical systems with higher global warming potential refrigerants and decommission or replace with modern alternatives, which are less prone to leaks and are also more efficient;**
- **continue to increase the use of Warp-It to encourage reuse of surplus equipment amongst partners; and**
- **implement a scheme to encourage staff and student involvement in waste and pollution reduction projects on campus and in the community.**

An action plan and outline programme for this theme is included in **APPENDIX C**.

SUSTAINABILITY THEME 4

SUSTAINABLE TRAVEL

Staff and student travel is a significant source of emissions and current estimates suggest that it could account for around 25% of our overall carbon footprint. Therefore, we have included in this plan those emissions which arise both directly and indirectly from the operation of the University, including the following sources:

- directly operated fleet, where Scope 1 emissions arise as a result of fuel purchased by the University being burned in University owned/operated vehicles;
- business travel by road, rail, sea or by air. These arise as a result of University operations, but are classified as Scope 3 emissions, as the mode of transport is operated by others; and
- commuting to and from the University by staff and students. Although not directly arising as a result of University operations, they do form part of our wider carbon footprint and we have a responsibility to encourage the use of lower carbon methods of travel.

Emissions from directly operated fleet can be quantified reliably using records of fuel purchased, vehicles used and the journeys made. The majority of our own fleet are

electric and we continue to look for practical opportunities to replace internal combustion vehicles with low carbon electric types. However, carbon emissions from fleet typically constitute <1% of our direct emissions. The majority of travel emissions therefore arise from business travel and commuting.

With details of long-distance business travel generally being captured through existing financial processes, the carbon impact of these journeys can be quantified and reported consistently, and with the generally accepted accuracy associated with applying published conversion factors. The indirect Scope 3 emissions arising from staff and student commuting are much more difficult to estimate accurately. Current figures are based on a survey of travel modes and journey types conducted several years ago and, despite inherent inaccuracies due to sample size and data bias, this is likely to be the most appropriate approach to this task. The survey will need to be updated to reflect changing travel behaviour driven by recent changes to working methods and learning delivery. Despite measurement challenges, our main focus will be on implementing the required actions to influence these emissions indirectly.



Our primary measurable aims related to achieving improvements in **Sustainability Theme 4 – Sustainable Travel** are summarised below.

We will:

- reduce the proportion of staff/students who mostly commute by car with a single occupant;
- increase the proportion of staff/students who mostly commute by car-share;
- increase the proportion of staff/students who mostly commute on foot, by bicycle or low carbon vehicle;
- reduce carbon emissions from directly owned and operated fleet;
- reduce carbon emissions from business travel by road, air and sea (including grey fleet);
- increase proportion of electric vehicles in direct operational fleet (100% target by 2025); and
- increase the number of electric vehicle charging points available for fleet/staff/student use

A detailed strategy to achieve these aims will be incorporated in the development of the forthcoming Travel Plan by members of the operational group. Our key actions to improve our performance against **Sustainability Theme 4 – Sustainable Travel** are listed below.

We will:

- investigate and understand impacts of changes to working practices, curriculum delivery, technology and student demographics;
- develop and publicise a sustainable travel strategy;
- collaborate with City of Sunderland Council on low carbon travel initiatives, such as the city-wide e-scooter programme to include multiple locations around Sunderland campuses;
- expand policies to encourage low carbon transport choices, such as cycle-to-work scheme and green car scheme;
- implement larger electric vehicle charging infrastructure to encourage adoption of low carbon vehicles;
- aim to replace operational fleet with 100% electric;
- align parking and business travel policies with environmental objectives; and
- maintain and raise awareness of cycle hub secure cycle storage and other provisions for travel between University sites without the use of a car.

An action plan and outline programme for this theme is included in **APPENDIX C**.



SUSTAINABILITY THEME 5

SUSTAINABLE PROCUREMENT

Supply chain emissions from the goods and services purchased by the University are estimated to be responsible for at least 50% of our wider carbon footprint. We continue to report and quantify them using approved methodologies, although understanding and analysing these indirect Scope 3 emissions is still a work-in-progress, as it is for many organisations.

Despite inherent measurement inaccuracies, the University will focus on influencing environmental impacts through continuing to adopt and improve sustainable procurement practices, prioritising sustainability in product and service selection, incorporating whole-life impacts where possible, as well as working with suppliers to demonstrate similar levels of commitment to sustainability.

It is not only our procurement professionals who can influence sustainable procurement, and success in this area will engage colleagues from other disciplines involved in supplier selection, specifying goods and services and contract management. Key categories have been identified as a focus for further work, in areas such as sustainable food and sustainable construction, for example.

Our primary measurable aims related to achieving improvements in **Sustainability Theme 5 – Sustainable Procurement** are summarised below.

We will:

- **reduce procurement related carbon emissions (subject to changes in methodology);**
- **seek internal and/or external verification of sustainable procurement practices and standards;**
- **reduce catering related impacts through the joint development and adoption of a sustainable food plan with third party catering company based in University premises; and**
- **reduce embodied carbon in the construction process. Identify an appropriate methodology and related procurement policies.**

A detailed strategy to achieve these aims within the Environmental Sustainability Plan will be developed by the sustainable procurement operational group, which will incorporate colleagues from the procurement team and other disciplines involved in specifying goods and services and contract management within high impact categories. Our key actions to improve our performance against **Sustainability Theme 5 – Sustainable Procurement** are listed below.

We will:

- **update and expand the Sustainable Procurement Strategy and publish with other sustainability plans;**
- **evaluate baseline and emissions calculation methodology to understand how changes in policy impact carbon emissions;**
- **identify the top five suppliers by carbon intensity and engage with them to evaluate and reduce supply chain emissions;**
- **investigate the value of and implementation resources required for external verification of sustainable procurement methods;**
- **develop a sustainable food policy to reduce catering related emissions and to encourage staff and students to make more informed menu choices; and**
- **begin to incorporate whole-life costing and embodied carbon accounting methodologies into new build and refurbishment construction projects.**

An action plan and outline programme for this theme is included in **APPENDIX C**.

SUSTAINABILITY THEME 6

SUSTAINABILITY EDUCATION

Education is key to sustainability, and universities are in a unique position to magnify the impact of their sustainability related efforts by equipping students with the knowledge, skills, enthusiasm and other attributes required to make a positive difference to sustainable development in a low carbon future.

The first step is for the University to identify and promote areas of the curriculum which are linked to sustainability. Further progress will require curriculum developers and educators to be equipped with the required resources to increase the sustainability content further.

A Sustainable Curriculum Initiative project, spearheaded by academic colleagues who are also directly involved in the University's sustainability planning, is already underway.

Sustainability education extends beyond the curriculum, and we will develop and promote opportunities for extra-curricular and informal learning, as well as encouraging students and staff to get involved in sustainability projects on and off-campus.

Our primary measurable aims related to achieving improvements in **Sustainability Theme 6 – Sustainability Education** are as summarised below.

We will:

- increase the proportion of sustainability related content across the student curriculum;
- increase the number of students who have received extra-curricular sustainability education or engaged in sustainability related development opportunities; and
- increase the proportion of staff who have engaged with accredited sustainability training (e.g. Carbon Literacy)

A detailed strategy to achieve these aims will be incorporated into the development of the forthcoming Sustainable Curriculum Initiative and a staff training plan by members of the operational group. Our key actions to improve our performance against **Sustainability Theme 6 – Sustainability Education** are listed below.

We will:

- conduct a survey amongst academic staff to baseline sustainable development content to the UN Sustainable Development Goals across the curriculum;
- engage with curriculum development to embed sustainability principles where relevant;
- develop and implement a programme of extra-curricular sustainability education, such as the Carbon Literacy project or equivalent; and
- identify and implement an appropriate accredited sustainability training programme for staff – integrate with extra-curricular student plans if practical.

An action plan and outline programme for this theme is included in **APPENDIX C**.



STRATEGIC ENVIRONMENTAL SUSTAINABILITY GROUP

The Strategic Environmental Sustainability Group (SESG) was formed in 2020 to drive and co-ordinate a refreshed sustainability agenda across the University. Chaired by the Chief Operating Officer and featuring representation from across the University, including professionals in Finance, Estates and Facilities and Procurement, as well as academics and the Students' Union, the group provides governance and oversight of our sustainability planning and delivery.

The group has overseen the development of this Environmental Sustainability Plan and will be responsible for the formation of the operational groups for each of the six sustainability themes and monitoring performance against this plan. The SESG provides the senior level support to progress the multiple facets of this plan and help overcome potential barriers and bottlenecks in delivery against the programme in **APPENDIX C**.

The primary aims of the Strategic Environmental Sustainability group are summarised below.

We will:

- **demonstrate leadership and best-practice to enhance the environmental reputation of the University and contribute to climate change mitigation;**
- **oversee the development and delivery of sustainability plans and ensure appropriate resources and expertise are in place;**
- **implement and modify policies to integrate and facilitate our sustainability aims;**
- **raise the profile of sustainability through regular and effective internal and external communications;**
- **increase opportunities for engagement and involvement in sustainability for students and staff;**
- **develop external partnerships to support and collaborate on sustainable development; and**
- **monitor and communicate performance**

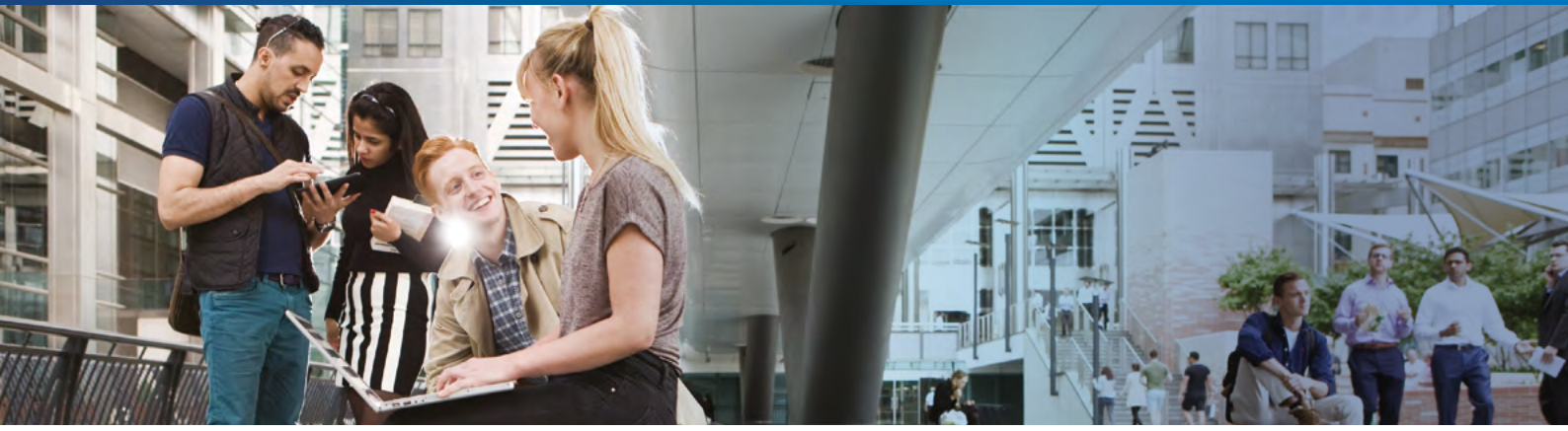
Our strategic oversight will be regularly benchmarked with the Sustainability Leadership Scorecard, which was developed by EAUC, AUDE and Arup specifically for the further and higher education sector. The self-assessment tool captures data from multiple sources and will allow us to compare baseline performance of our strategic governance, set targets and monitor continuous improvement against best practice in all areas of sustainability leadership.





GOVERNANCE

Executive Responsibility:	Steve Knight, Chief Operating Officer
Senior Lead Ownership:	Debbie Callaghan, Director of Estates and Facilities
Consultation:	Staff, Students, Students' Union, Employment Unions, University Executive
University Board/ Committee Approval:	Strategic Environmental Sustainability Group; Finance Development and Resources Committee
Board of Governors Approval:	14th October, 2021
Publication:	[INSERT DATE]



SUPPORTING DOCUMENTS

This Plan is underpinned by the following plans and frameworks:

- One Campus Masterplan
- Capital Investment Plan 2020-23
- Estates Plan 2025



APPENDICES

APPENDIX A

EMISSIONS MEASUREMENT, DEFINITIONS AND SCOPES

Zero-carbon, net-zero carbon or carbon neutral?

The terminology and definitions of zero carbon, net-zero carbon and carbon neutral have caused confusion for the public and even disagreements over the credibility of these definitions amongst the scientific community. It is therefore important to clarify the definitions used in this report:

Zero carbon – the easiest to define, but difficult to achieve in practice. No carbon would be produced by a process or organisation.

Carbon neutral – carbon can be emitted by a process or organisation, as long as it is equally offset elsewhere. Offsetting could involve implementing or investing in a scheme anywhere in the world which reduces carbon emissions by an equivalent amount.

Net-zero carbon – carbon can be emitted by a process or organisation, as long as an equivalent amount is removed elsewhere. Examples of removal could include large-scale forestation projects or carbon capture and storage (CCS).

Despite net-zero carbon causing the most technical problems, this is the term which has recently proliferated in the media and has also featured in legislation. It is important to note that the initial stage for the University, regardless of which definition is applied, is to reduce emissions as far as possible before offsetting or removing the remaining emissions. It is expected

that during the lifetime of this plan, the University will still be at the emissions reduction stage, before an offsetting strategy for the remaining emissions is implemented.

Emissions measurement and scope

For consistency and credibility of carbon and other greenhouse gas (GHG) emissions measurement, we will align our reporting against this plan with the GHG Protocol, which categorises emissions related to an organisation in three different scopes:

Scope 1 – relates to GHG emissions which arise directly from the University's assets or operations, such as the combustion of natural gas in our heating boilers or fuel in University vehicles.

Scope 2 – relates to GHG emissions which arise indirectly from the University's assets or operations, such as purchased electricity, which is used in the University's buildings, but is generated elsewhere.

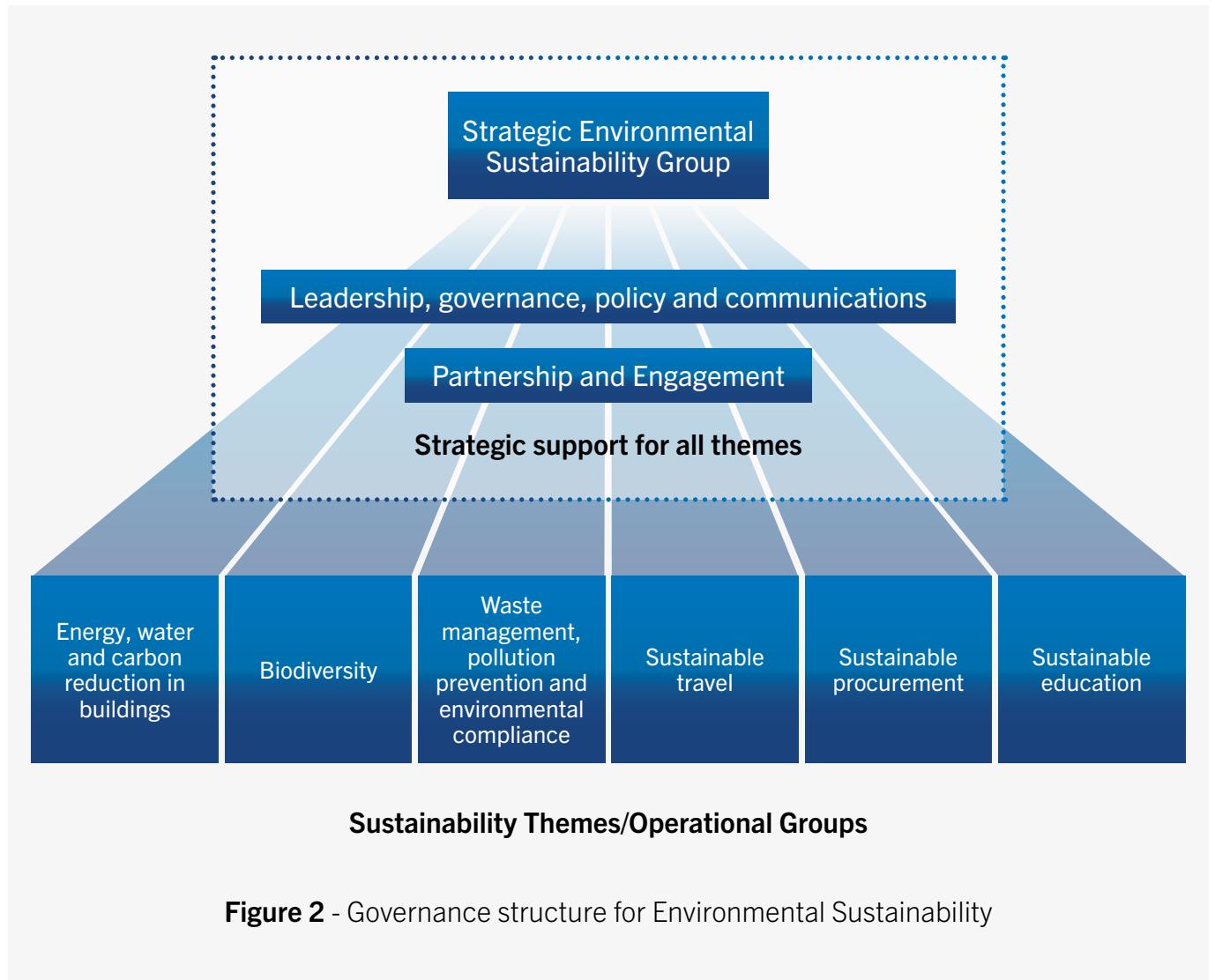
Scope 3 – relates to all other sources of GHG emissions that occur indirectly as a result of the University's operations. Examples include business travel, commuting by staff and students, waste disposal and procurement related emissions.

NB: When 'emissions' or 'carbon emissions' are referred to in this plan, this typically applies to carbon dioxide equivalent emissions (CO₂e) in line with the GHG Protocol.

APPENDIX B

GOVERNANCE AND OPERATIONAL FRAMEWORK

The governance and operational delivery structure is shown below in **Figure 2**. The Strategic Environmental Sustainability Group oversees and co-ordinates the development and delivery of sustainability plans. Six operational groups progress these plans against each of the Sustainability Themes.



APPENDIX C

ENVIRONMENTAL SUSTAINABILITY PLAN - ACTION PLAN AND OUTLINE PROGRAMME

ENVIRONMENTAL SUSTAINABILITY PLAN Themes, Key Measures and Action Plan 2025		STRATEGIC ENVIRONMENTAL SUSTAINABILITY GROUP - STRATEGIC GOVERNANCE AND OVERSIGHT			
		THEME 1 - Energy, water and carbon in buildings	THEME 2 - Biodiversity	THEME 3 - Waste management, pollution prevention and environmental compliance	THEME 4 - Sustainable travel
		THEME 5 - Sustainable procurement	THEME 6 - Sustainable education		
2020/21	2021/22	2022/23	2023/24	2024/25	
SESG formed	Op. Groups formed	Engagement Plans	Supplier review 1		
	SLS baseline, target action plan	Building energy efficiency retrofits inc. heat decarbonisation transition (heat pumps, heat networks)	Carbon Literacy Training Pilot		
100kW PV generation	E & F Biodiversity Plan	Sustainable travel plan	Supplier review 2 & 3		
LED lighting retrofits PH1	Travel Survey 1	Travel Survey 2	Supplier review 4 & 5		
	Operational fleet 100% EV by 2025				
	Heat Decarbonisation Plan 2030	ISO 50001 EnMS accreditation	Travel Survey 3		Travel Survey 4
	Sustainability Curriculum Initiative	LED lgt. retrofit PH2			
		Curriculum survey (UN SDGs)			
	Carbon Management Plan 2030	EV Charging Infrastructure Ph1	EV Charging Infrastructure Ph2		
	Energy efficiency installations Ph1	Energy efficiency installations Ph2	Energy efficiency installations Ph3		Energy efficiency installations Ph4
	200kW PV generation	400kW PV generation	700kW PV generation		1MW PV generation target
	Sust. Procurement M & V methodology				
	Sust. Construction Policy				
	WMPP & EC Plan	Sust. Food Policy			
		ISO 140001 EMS accreditation			
KEY MEASURES FOR THE ENVIRONMENTAL SUSTAINABILITY PLAN					
No.	1	2	3	4	5
	Reduce carbon emissions arising from energy use in our buildings	Increase the proportion of our heat and power from renewable sources	Reduce our water use	Improve the biodiversity value of our estate and local area	Reduce non-recyclable waste and prevent harmful discharges to air, land and water
	6	7	8	9	10
	Reduce the environmental impacts of our fleet, business travel and commuting by our staff	Reduce indirect supply chain emissions from procurement of goods and services, including areas such as sustainable food and construction	Increase the proportion of the student curriculum which is related to the United Nations Sustainable Development Goals (UN SDGs)	Increase the provision of opportunities for additional learning and engagement in sustainable projects for students and staff	Increase our ratings against the Sustainability Leadership Scorecard for internal engagement and communications, with a focus on demonstrating leadership in sustainability
	11	12			
	Increase our ratings against the Sustainability Leadership Scorecard external engagement and communications, with a focus on partnership working and sharing best practice	Implement robust Monitoring and Verification (M&V) for each theme to monitor performance and increase the credibility of reporting			

Figure 3 - Extract from the action plan/programme to show how the aims and actions relate to each sustainability theme

