



Edge Hill  
University

# **Environmental Sustainability Delivery Plan**

*2022 to 2025*

# Executive Summary

This Delivery Plan will support the Environmental Sustainability Strategy (ESS) and the Carbon Management Plan (CMP) by providing more tangible and measurable objectives, setting out more specifically how the commitments set out in the ESS and CMP can be met. The Delivery Plan will run throughout the life of the two documents (until 2025), with progress being regularly reviewed at the Institutional Environmental Sustainability Committee meetings and reported on annually through the Environmental Sustainability Annual Report to the Board of Governors.

To support Edge Hill University's ambitious plans around sustainability it has become clear that there is a need to develop this Delivery Plan document which allows for objectives to run over multiple years, thus allowing a more holistic approach to be taken to environmental sustainability. These objectives must be developed to align with the ESS and/or the CMP. Alongside the objectives it is imperative that indicative investment requirements are provided to support budget development.

The provision of clear, measurable and costed objectives that span the University's operations will allow Edge Hill University to improve its environmental sustainability targets outlined in the ESS and CMP, as well as improving the experience it provides to staff, students and the wider community. This will be done under seven strategic themes: Leadership and Governance, Estates and Operations, Learning and Teaching (and Research), Partnerships and Engagement, Energy Reduction, Decarbonisation, and Renewables.

# Contents

<b>Introduction</b>	<b>4</b>
Carbon emissions scopes	5
Sustainable campus development	6
Campus development timeline	6
<b>Strategic Targets: Environmental Sustainability Strategy</b>	<b>8</b>
<b>Strategic Targets: Carbon Management Plan</b>	<b>9</b>
<b>Leadership and Governance Objectives</b>	<b>10</b>
<b>Estates and Operations Objectives</b>	<b>11</b>
<b>Learning and Teaching (and Research) Objectives</b>	<b>14</b>
<b>Partnership and Engagement Objectives</b>	<b>15</b>
<b>Energy Reduction Objectives</b>	<b>16</b>
<b>Decarbonisation Objectives</b>	<b>17</b>
<b>Renewables Objectives</b>	<b>18</b>
<b>Delivery Plan Timelines</b>	<b>19</b>
<b>Appendix One: ESS Objectives</b>	<b>20</b>
<b>Appendix Two: CMP Objectives</b>	<b>34</b>
<b>Appendix Three: LED Project Energy Saving Calculator Report Example</b>	<b>41</b>



## Introduction

The Edge Hill University Environmental Sustainability Strategy 2021-2025 (ESS) sets out the University's commitment and direction of travel in relation to environmental sustainability. It identifies 4 key themes (Leadership and Governance, Estates and Operations, Learning and Teaching, and Partnership and Engagement) through which enhancements in performance will be driven and broadly describes the ways in which this will be achieved.

Sitting alongside the ESS is the Carbon Management Plan (CMP) 2022-2025 which outlines the University's commitments of reducing carbon emissions in line with its 3 themes (Energy Reduction, Decarbonisation, and Renewables). Internationally, nationally and within Edge Hill University there is an emphasis on carbon management and the need to reduce emissions to minimise our impact on the environment.

This Delivery Plan sets out tangible and measurable objectives to ensure that targets committed to in the ESS and/or CMP will be met. Going forward all three documents will remain in alignment regarding their timeframes to support a cohesive approach to addressing environmental sustainability at EHU.

Objectives have been identified through a variety of means, based upon the themes of the ESS and CMP, in consultation with faculties and departments across the University, from research of best practice across the sector and through analysis of data available on current performance. These objectives vary in timescales with short, medium and long term objectives included, and the plan remains an agile and live document where further objectives can be added as the plan evolves.

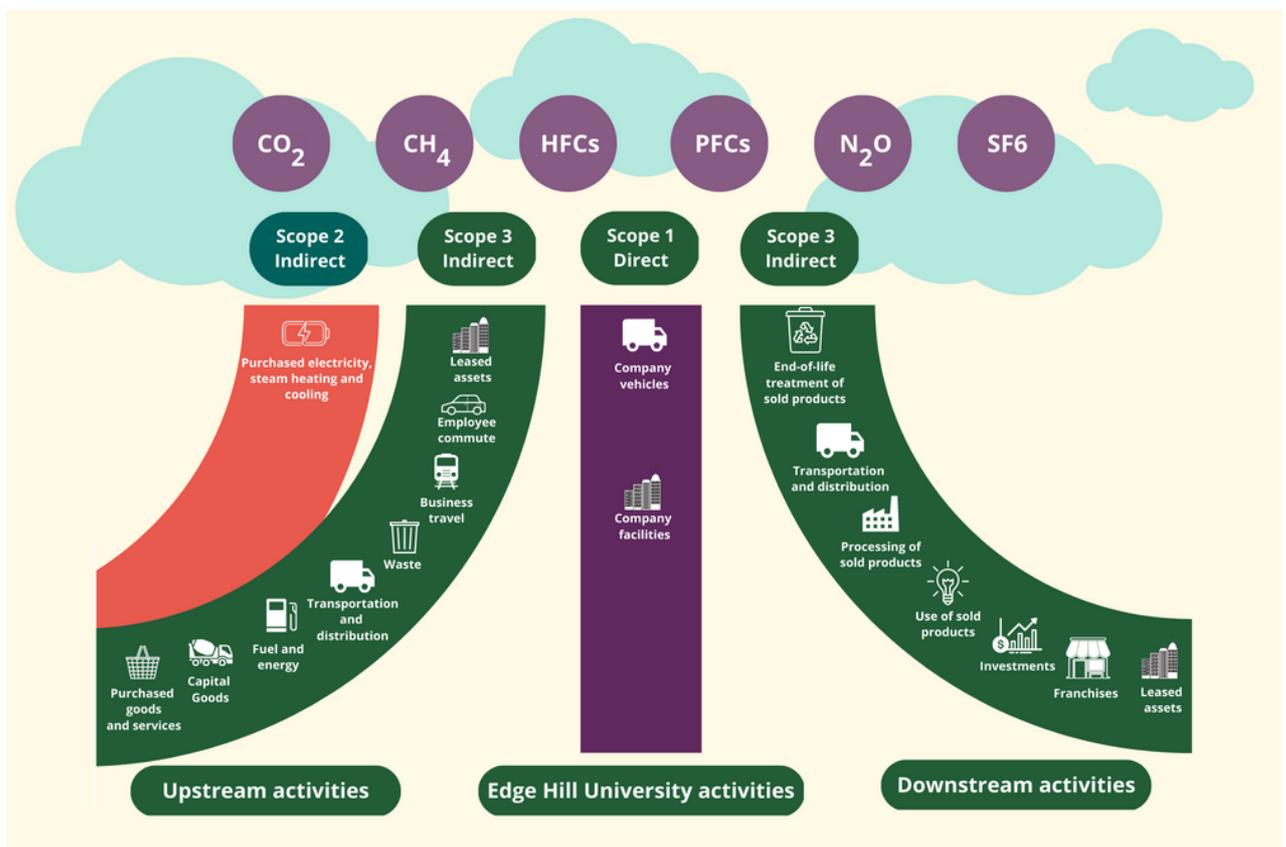
The main oversight and reporting responsibilities will sit with the Sustainability Manager, however each objective has been assigned an owner who has responsibility for the delivery and day-to-day management of the objective.

## Carbon Emission Scopes

To fully understand the scope of our Carbon Management Plan themes and objectives it is important to clearly establish the emissions being included in our reporting.

Edge Hill University aims to to monitor and reduce all emissions related to our operations. Carbon CO<sub>2</sub>e emissions (which includes CO<sub>2</sub>, PFCs, HFCs, CH<sub>4</sub>, N<sub>2</sub>O and SF<sub>6</sub>) are separated into three Scopes:

Scope 1 – Direct Emissions,  
Scope 2 – Indirect Emissions, and  
Scope 3 – Other Indirect Emissions.



Upstream activities are those resulting from activities that occur during the production of materials or services used by EHU. Downstream activities covers activities that occur after EHU has finished using materials or services.

## Sustainable campus development

Over the last 10 to 15 years there are several examples of how the campus has developed great facilities whilst incorporating sustainable design to ensure that the environmental impacts of the campus are minimised. The sustainable campus development timeline summarises some of the key initiatives that have been integrated into campus development in recent years.

The continued development of the University campus is critical to providing an environment where students can thrive, and long-term recruitment and retention of students can be sustained.

### Campus development timeline

On the next page we have detailed a timeline depicting key campus developments since 2007. In addition to this, we have continuously developed the below measures:



LED lighting & sensor upgrades



Native habitat creation with trees, meadows, logs & rewilding



Water collection & storage network developed across Ormskirk campus

**Faculty of Health**  
Ground source heat pumps & solar thermal

2007

2008

**Business School**  
Solar thermal & green roof

**Accommodation (Founders Court)**  
Triple glazing, improved insulation & solar thermal  
*Sustainable Building of the Year* Faculty of Health

2009

**Accommodation (Graduates Court) & Sport hall Refurbishment**

Triple glazing, improved insulation & heat network

2010

**Durning Centre**  
Solar PV, waste IT heat network, natural ventilation & lighting

**Student Hub & Milton House**  
Energy efficient boilers & modifications

2011

**Accommodation (Chancellors Court & Founders Court)**

Triple glazing, improved insulation & solar thermal

2012

**Creative Edge**  
Reduced carbon footprint, water efficiency measures, heat recovery & export to Sport & accommodation

2013

**Accommodation (Chancellors South)**

Triple glazing, improved insulation & solar thermal

2014

**Sports Building**  
Expanded waste heat network to include Creative Edge

2015

**Geosciences**  
Installed rock crushing lab

**Tech Hub**  
Solar PV, waste heat reuse, natural lighting & ventilation.

2016

**Campus-wide Improvements**  
Insulation updated, energy centre additional links, heating & hot water network improved

2017

**Catalyst Roof garden**  
High specification sustainable features

2019

**Medical School**  
Heat pump, cooling with recovery systems & condensing boilers

2020

**Main Building**  
Improved insulation, glazing & heat management system

2021



# Strategic Targets: Environmental Sustainability Strategy

The ESS sets out the areas in which the University will strive to improve performance across its four themes: Leadership and Governance, Estates and Operations, Learning and Teaching (including Research), and Partnership and Engagement. In order to assess and demonstrate progress through delivery of objectives related to the plan, the following strategic targets have been identified:

## Leadership and Governance

- To establish a governance structure aligned to the Environmental, Social and Governance (ESG) framework.

## Estates and Operations

- Reduce carbon emissions by 10% by 2025 (against 2018/19 baseline)
- Become Carbon Neutral by 2030
- Reduce carbon intensity by 30% by 2025 (again 2018/19 baseline)
- Reach Net Zero by 2035
- 0% waste to landfill and 70% recycling rate by 2025
- 10 EV charge points on campus by 2024
- Maintain high numbers of journeys on EL1 per academic year

## Learning and Teaching (including Research)

- Deliver Carbon Literacy training to 100 individuals (staff and students) per academic year
- Education for Sustainable Development (ESD) embedded across all teaching and research by 2025

## Partnerships and Engagement

- Increase SustainNET partner organisation number to 60
- Deliver Lancashire Community Climate Action Forum in May 2023



# Strategic Targets: Carbon Management Plan

The CMP sets out how EHU plans to reach first Carbon Neutrality and then Net Zero across three themes: Energy Reduction, Decarbonisation and Renewables. The following strategic targets have been identified:

- Reduce carbon emissions by 10% by 2025
- Reduce carbon intensity by 30% by 2025

To support these targets the following objectives have been developed within each of the CMP themes:

## Energy Reduction

- Reduce energy consumption through increasing building insulation and BMS improvements
- Running an annual 'switch off' campaign over Winter Break to encourage students to reduce energy use through switching off non-essential electrical equipment before leaving campus

## Decarbonisation

- Investing in a carbon tracking system to improve scope 1, 2 and 3 reporting

## Renewables

- Increase investment in renewables to improve behind the meter energy generation and therefore reduce reliance on the national grid



# Leadership and Governance Objectives - ESS

## Leadership | Risk | Staff engagement and human resources | Health and wellbeing

Central to improvements in this area will be alignment of the University to recognised and established means of governance and management relating to sustainability and environmental management.

Environmental, Social and Governance (ESG) is a framework designed to be integrated into an organisational strategy to create enterprise value by expanding the organisational objectives to include the identification, assessment and management of sustainability-related risks and opportunities in respect to all organisational stakeholders and the environment. ESG is aligned with the UN Sustainable Development Goals (UN SDGs) which are already integrated into EHU's ESS.

For the areas more specific to improvements in environmental sustainability, ISO 14001:2015 is a well-recognised international standard, designed to ensure obligations in relation to environmental management are being met and that there is continual improvement in how the environment is being managed.

Recognising that both of these frameworks would enhance the leadership and governance arrangements of the University, the following objectives are in place:

- 1) Environmental, Social and Governance Corporate Framework
- 2) Environmental, Social and Governance Corporate System
- 3) ISO 14001 Implementation
- 4) Staffing resources - recruitment of an Energy Manager
- 5) Staffing resources - annual review
- 6) Operational evaluation
- 7) Post-2025 Strategy Development.



# Estates and Operations

## Objectives - ESS

### Biodiversity | Water | Resource efficiency | Waste | Construction and renovation

The Estates and Operations element of this strategy incorporates a range of topics associated with how the University campus and associated activities are managed.

The most significant aspect of this from a sustainability point of view is energy and carbon management associated with the University's infrastructure - objectives around this are the focus of the CMP and will be outlined later in this document.

Other objectives around waste, travel, biodiversity, procurement, catering and utilities have also been identified and will be outlined here.

### Waste

The University has worked closely with the waste management contractor to develop an onsite waste management compound to sort waste streams and endeavour to achieve good recycling rates. There are further enhancements that can be made to the way waste is managed both in terms of the waste generated by activities and at point of disposal by staff and students. The following objectives are in place regarding waste:

- 1) Waste Management Strategy - development and initiation
- 2) Waste Contract Procurement
- 3) Big Clear Out Partnership

## Travel

Edge Hill University has a large community of commuting staff and students given that many students attend from within a 30-mile radius of campus.

Local public transport links can be limited depending on the area from which people travel. Sustainable travel is important in terms of reducing carbon emissions, encouraging a move away from single occupancy vehicles and also encouraging active travel for health and wellbeing. There is limited parking available on campus so there are strong operational reasons to encourage people to move away attending campus in their own car. The University currently operates the EdgeLink bus service which is a free 20-minute circular route to Ormskirk town centre. Additionally, there are initiatives to encourage car sharing and cycling to work, along with a car permit system to ensure that only those who meet specific qualifying criteria are able to be issued with a permit.

There are more objectives that have been identified which will improve the travel options to the University and promote more sustainable travel:

- 1) Travel Survey and Plan
- 2) EV Charge Points
- 3) Review of Car Share Platform
- 4) Edge Hill Sports Team Travel
- 5) Bicycle Storage

## Biodiversity

The very nature of the Ormskirk campus lends itself to supporting biodiversity with a range of habitats present on and around the campus. These include wooded areas, a meadow and lakes. As such EHU is constantly striving to not only maintain the current biodiversity levels, but also where possible to sympathetically improve it.

Several objectives have been identified to continue our commitment to biodiversity at EHU:

- 1) Biodiversity Action Plan
- 2) Allotment Upgrade
- 3) Citizen Science Ecology

## Procurement

Working alongside procurement changes have already been made across EHU to ensure sustainability is embedded within the procurement process leading to a range of measures having already been implemented:

- Catering have phased out single-use plastic cutlery and introduced compostable take-away containers.
- Within Facilities Management Sustainability is now part of the Business Case assessment process.

To further our ambition to increase the sustainability of procurement processes at EHU we have the following objectives:

- 1) Procurement Policy
- 2) Printing Strategy

## Catering

Within catering there are a range of measures already in place to address sustainability, there are also objectives established elsewhere in this document that will be of benefit to catering - for example it is expected that the waste management strategy will be beneficial to catering.

We have identified two additional objectives surrounding catering:

- 1) Packaging Audit
- 2) Coffee Cup Recycling

## Utilities

Alongside a clear need to reduce our utility use to bring down carbon emissions and the associated costs of utilities we have identified additional objectives to commit to as follows:

- 1) Utility Forensic Audit
- 2) Water Audit
- 3) Building Water Checks



# Learning and Teaching (and Research) Objectives - ESS

## Student engagement | Learning and teaching | Research

EHU is committed to embedding Education for Sustainable Development (ESD) principles across our teaching and research frameworks to ensure that we are actively engaging our whole community, staff and students, in sustainable development issues.

Working with each of the faculties we have already increased the prevalence of sustainability across the curriculum. An example of this can be seen within the Faculty of Education where lecturers have made strides to incorporate Learning Outside the Classroom (LOtC) practices.

Opportunities have been identified that will support both staff and students in accessing learning around sustainability and the environment. Based on this a range of objectives have been developed:

- 1) Carbon Literate Organisation
- 2) SustainNET Webinar Series
- 3) SustainNET ESD Team
- 4) Curriculum Review
- 5) Postgraduate Studentships
- 6) Careers - Sustainable Recruitment
- 7) Graduate Attributes.

In addition to this the feasibility of the RIMES (Research Internships for Minority Ethnic Students) Project being continued is being explored. This project ran successfully in 2021/22, the focus of which is United Nations Sustainable Development Goal (UN SDG)-based research.



## Partnerships and Engagement Objectives (ESS)

**Community and public engagement | Procurement and supplier | Food and drink**

The partnerships and engagement theme of this strategy adds value to our collaborations, helping put a community focus on our sustainability projects.

Success in this theme brings global and intercultural perspective into our work and empowers our role as an anchor institution in Ormskirk and the wider region. We achieve this through collaboration at regional, national and international levels, via our SustainNET partnership and EAUC (Alliance for Sustainability Leadership in Education) platform. Through online membership, staff at EHU can access UK-wide networks for reporting and comparison, helping promote sector-wide progress and community involvement.

Based on our current successes a range of objectives to further our partnership and engagement work have been developed:

- 1) Lancashire Community Climate Action Forum (Community Sustainability Forum)
- 2) CSR Policy
- 3) SustainNET membership.

Additionally the feasibility of establishing a SustainNET Consultancy Agency and a Community-Owned Business Project is being determined. A Consultancy Agency would look to establish a team of sustainability experts selected from among SustainNET's academic staff to form a consultancy team on sustainability issues. This new agency will offer professionalised consultancy services to external organisations. The Community-Owned Business Project will look to establish a collaborative research project with local community-owned businesses (a form of social enterprise), most of whom will be focused on a number of Sustainable Development Goals (SDGs).



## **Energy Reduction Objectives - CMP**

Key to meeting the targets that EHU has set in the CMP to become Carbon Neutral and then Net Zero is an overall reduction in energy consumption. In order to meet this strategic ambition the following objectives have been identified:

- 1) Pipe Lagging
- 2) Lighting Upgrades
- 3) Installation of Photocells in External Lighting
- 4) BMS Controllers
- 5) BMS Enhancements
- 6) Window Upgrades
- 7) FoH Heating and Cooling
- 8) FoE Heating
- 9) Automatic Meters
- 10) Life Sciences Development/Sustainability Tracker

These objectives are aimed at targeting Scope 1 company facility emissions and Scope 2 purchased electricity, steam, heating and cooling emissions.



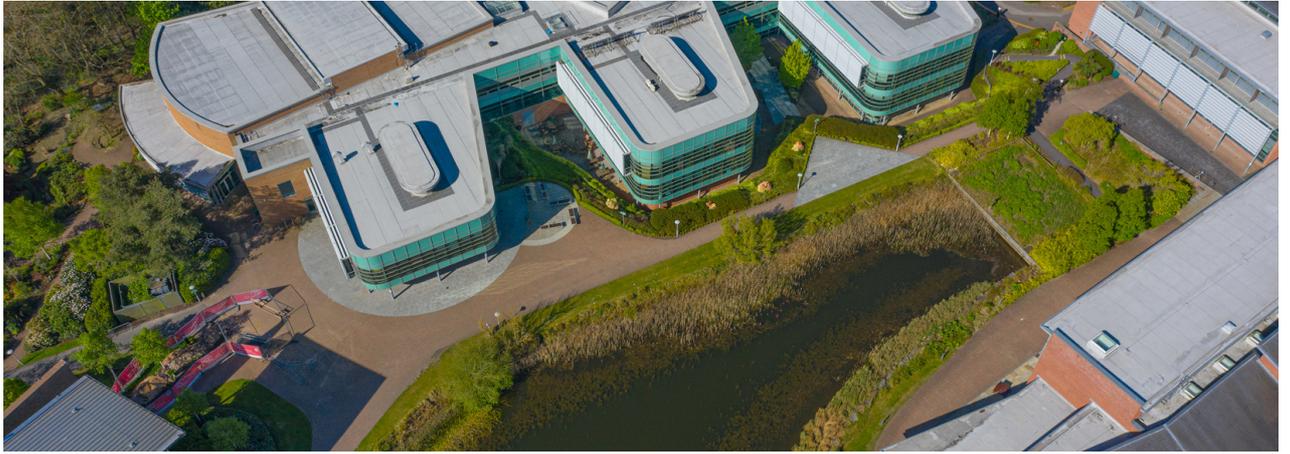
# Decarbonisation Objectives - CMP

To reach Net Zero it is important the EHU decarbonises its activities across Scope 1, 2 and 3 emissions. Initially work is focusing on scopes 1 and 2 as that is where the University has a greater understanding. Work to deliver decarbonisation around scope 3 emissions will come under the next delivery plan commencing in 2025.

A range of objectives have been identified to support EHU in working towards decarbonisation:

- 1) Carbon Tracking System
- 2) Heat Decarbonisation Plan
- 3) Degasification of Heating
- 4) Procurement Approved 'Green List'
- 5) Carbon Offsetting

These objectives look to address emissions from Scopes 1, 2 and 3 through the carbon tracking system as well as the Scope 1 company facilities emissions and Scope 3 emissions from purchased goods and services.



# Renewables

## Objectives - CMP

The implementation of more renewables across the EHU campus to increase behind the meter energy generation is important in the move to hitting targets identified in the CMP. This will not only allow EHU to become greener, but will also reduce reliance on energy from the National Grid which will in turn reduce energy-related costs.

A number of objectives around renewables have been developed:

- 1) Solar PV Phase One
- 2) Solar PV Phase Two
- 3) Car Park C Project
- 4) Eastern Campus
- 5) Strategic Partnership for Electricity Procurement

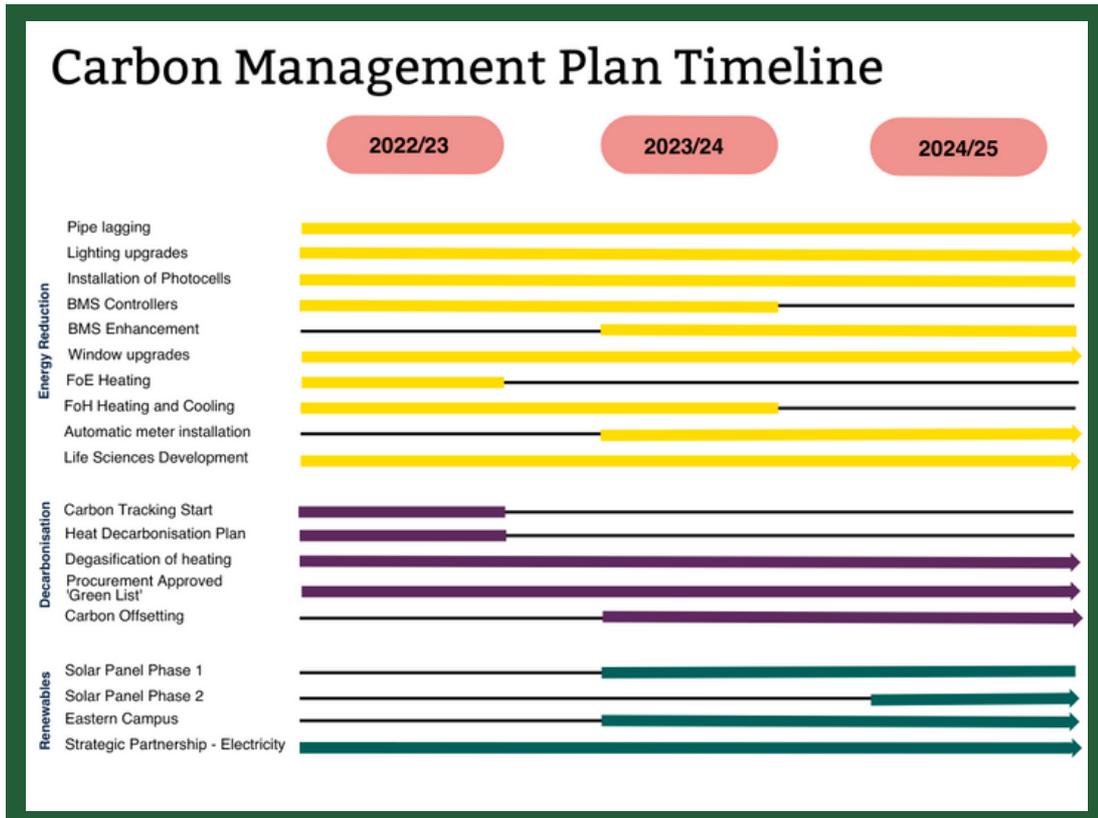
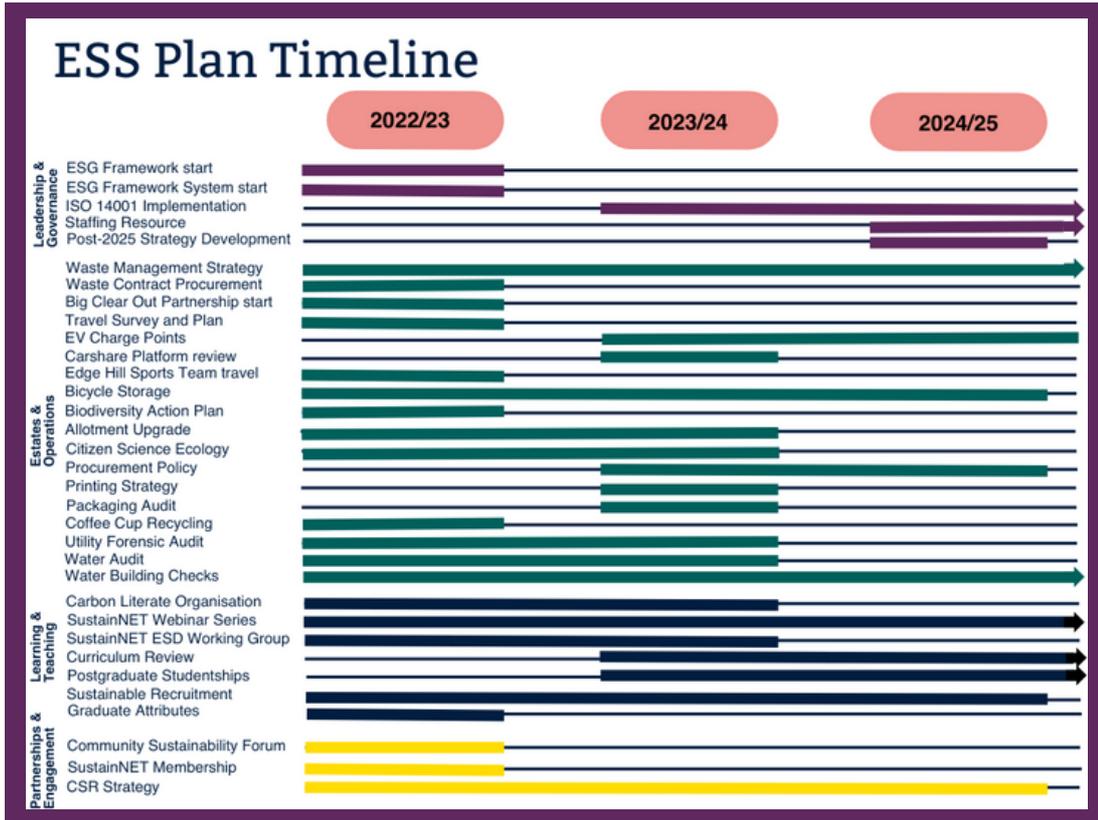
The Solar PV Phase One project will include a full feasibility study regarding battery implementation requirements.

These objectives target Scope 1 company facility emissions and Scope 2 purchased electricity, steam, heating and cooling emissions.

# Delivery Plan Timelines

The timeline for delivering the objectives identified in this document is outlined here. These have been grouped depending on whether they are supporting the ESS or CMP, as well as by the theme they address.

For each of the objectives below, where investment is required, the business case process will be followed to ensure that the investment is sound, necessary and represents the best value for money. Further details regarding each of the objectives below can be found in the appendix including indicative investment.



# Appendix One: ESS Objectives

## Leadership and Governance

Objective 1: Environmental, Social and Governance Corporate Framework		Benefit
Development of an ESG working group to coordinate the University's activities and ensure alignment with strategy/ESG principles		Provision of a specific forum to support the delivery of the ESS and ESG framework across the University. This will ensure a coordinated approach across the University and alignment of initiatives to the strategy and drive forward the ESSDP and eCMP.
Owner	Timescales	Investment Required
Sustainability Manager	Year 1 onwards	-
Objective 2: Environmental, Social and Governance Corporate System		Benefit
Investment in an ESG system for the capture of data from across the University in a single place, allowing both for ease of data collection but also increased transparency and easier reporting.		A single ESG system would streamline the data collection process, making data analysis and reporting easier and more efficient. The adoption of such a system would also help de-risk reporting though allowing increased access and auditing of reported data.
Owner	Timescales	Investment Required
Sustainability Manager	Year 1 onwards	-
Objective 3: ISO 14001 Implementation		Benefit
Implement arrangements across the University aligned to ISO 14001 to ensure have a clear Environmental Management System in place		The University will be aligned to best practice in ensuring compliance and continual improvement in environmental management, embedded into University decision-making.
Owner	Timescales	Investment Required
Sustainability Manager	Year 2 onwards	-

<b>Objective 4: Staffing Resources Energy Manager</b>		<b>Benefit</b>
Key to the implementation of the ESS and CMP is resource around an Energy Manager to provide specialist, dedicated support to the delivery of the objectives necessary to reaching carbon neutrality/net zero.		A dedicated Energy Manager would provide the specialist, dedicated support and knowledge to support the smooth operation of the energy-related objectives related to EHUs decarbonisation journey. Having this resource in house, rather than relying on external consultants will be de-risk the process and also ensure there is greater oversight of processes and decisions.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1 onwards	-

<b>Objective 5: Staffing Resources Annual Review</b>		<b>Benefit</b>
Annually a review of staffing will be undertaken to determine where there are gaps that need filling in order to support EHU in reaching its sustainability objectives.		Review of resources will ensure that the improvements made through the Delivery Plan can be maintained and further progress can continue to be made.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Director of Facilities Management and Operational Risk and Environment Team	Year 3 onwards	-

<b>Objective 6: Operational Evaluation</b>		<b>Benefit</b>
To ensure that EHUs sustainability agenda remains ambitious, relevant and in line with developments continuous evaluation of best practice, technological developments and emerging technologies will be undertaken to ensure appropriate campus development is undertaken.		Reputational enhancement by ensuring the EHU remains current within the emerging sustainability technological advances. Remaining up to date may also open up new technologies that help reduce costs, carbon footprint and resource requirements.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Sustainability Manager	Year 1 onwards	-

<b>Objective 7: Post 2025 Strategy Development</b>		<b>Benefit</b>
<p>To ensure a strong post-2025 strategy is developed it is important a number of steps are undertaken. This will involve undertaking a review of the current delivery plan to establish benefit realisation, with benchmarking and peer review used to inform the direction of travel for the post-2025 strategy.</p>		<p>These activities will allow for a strong post-2025 strategy to be developed that firmly positions EHU within the sector as an institute that takes sustainability seriously and is being proactive in tackling its impact on the environment.</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Sustainability Manager and Operational Risk and Environment Manager	Year 3	-

### **Estates and Operations: Waste**

<b>Objective 8: Waste Management Strategy</b>		<b>Benefit</b>
<p>Introduction of a waste management plan based on the Waste Infrastructure Review. This will include, but not be limited to, introduction of standard bin types across campus, increasing the waste streams recycled across campus, improvements to signage and communication around waste.</p>		<p>These changes will support EHU's aim to increase recycling rates and reduce waste going to RFD. There are also financial benefits if we can reduce waste. Improvements to bins and signage will improve staff and student experience.</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Site Services Manager and Sustainability Manager	Year 1 - Write Strategy Year 2 onwards - Implementation	-

Objective 9: Waste Contract Procurement		Benefit
Undertake a strategic review of the waste management contract to ensure procurement of a new waste management partner is selected to deliver continual improvement in campus waste management.		Waste is not only a major way in which EHU can improve its carbon footprint and impact on the environment if managed in a sustainable way, but there is also massive potential to save money in this area. For example through implementing an effective circular economy model in the future EHU would save money.
Owner	Timescales	Investment Required
Site Services Manager, Head of Estates Management and Sustainability Manager	Year 1	-
Objective 10: Big Clear Out Partnership		Benefit
Form a partnership with a charity organisation to manage the belongings donated through the Big Clear Out.		Through partnering with one organisation the process will be more efficient reducing the amount of time required by EHU staff for organising items. Using Tawd Vale Lions for this will be beneficial as: <ul style="list-style-type: none"> <li>• They focus on the local community</li> <li>• They can provide weights for donations, improving reporting</li> <li>• Using a local charity reduces the associated transportation carbon footprint</li> </ul>
Owner	Timescales	Investment Required
Sustainability Manager	Year 1	-

## Estates and Operations: Travel

Objective 11: Travel Survey and Plan		Benefit
Undertake a travel survey and develop a travel plan based on the survey. To be representative of the staff and student population a minimum 10% return rate is required from both groups.		Creation of a travel plan to create medium-term strategy to effectively manage and improve travel.
Owner	Timescales	Investment Required
Sustainability Manager	Year 1	-

Objective 12: EV Charge Points		Benefit
<p>Install EV charge points at the Ormskirk campus to allow for electric car charging for staff, students and visitors.</p> <p>Will include purchase of a system to allow for monitoring of use, setting of charges and account management in house to allow for better understanding of demand and to de-risk management/roll out of further charge points.</p>		Low carbon car travel will be supported to campus with the ability to charge commuters cars and allow for electrification of the EHU fleet.
Owner	Timescales	Investment Required
Sustainability Manager	Year 2 - 3	-

Objective 13: Review of Car Share Platform		Benefit
<p>Undertake a review of the current car share platform for suitability to meet needs of the University and to consider options for an enhanced platform.</p> <p>Review will be undertaken based on recommendations from Travel Survey.</p>		Ensure the platform used to support staff and students to car share is best suited to encourage greater use of this initiative.
Owner	Timescales	Investment Required
Sustainability Manager	Year 2	-

Objective 14: Edge Hill Sports Team Travel		Benefit
Recording and reporting on travel to external team matches via transport provided by EHU		To better understand the carbon impact of travel to sporting events and enable decisions to be made with environmental impact in mind regarding future transport decisions. Can be used as a template for other departments to track the carbon footprint of their travel e.g. field trips.
Owner	Timescales	Investment Required
Sustainability Officer	Year 1	-

Objective 15: Bicycle Storage		Benefit
Install upgraded secure bicycle storage facilities on campus to support cycle commuters and meet the needs of residential students Proposal is for 3 storage areas fitting 20 bikes each - one in Eastern, one in Western and one in Central campus		Replacement of current bike storage lockers for a more modern and secure facility to allow commuters to easily store their bikes and additionally to provide better facilities for residential students. Improvement of campus aesthetics.
Owner	Timescales	Investment Required
Sustainability Manager	Years 1 - 3	-

## Estates and Operations: Biodiversity

Objective 16: Biodiversity Action Plan		Benefit
The development of a Biodiversity Action Plan to allow EHU to continue to plan ways in which biodiversity can be supported on and around the Ormskirk campus.		Increased biodiversity to benefit the environment, staff/student wellbeing and development of the campus as a Living Laboratory to support teaching and research.
Owner	Timescales	Investment Required
Sustainability Manager	Year 1	-

Objective 17: Allotment Upgrade		Benefit
Upgrade and improve the allotment site at 57 St Helens Road		Opening the site up for use again by staff and students for research, teaching and personal use. Support of mental health wellbeing through access to outdoor spaces, fresh fruit/veg and reducing isolation.
Owner	Timescales	Investment Required
Grounds Manager	Year 1 - 2	-

Objective 18: Citizen Science Ecology		Benefit
To improve our understanding of ecology on campus a citizen science project will be implemented where staff, students and the community are encouraged to use a suitable ecological recording app to upload images and information about their sightings. This information can then be used to improve our understanding of flora and fauna distribution.		Improving our understanding of flora and fauna on/around campus will allow us to better manage our natural environment in a suitable and sustainable way.
Owner	Timescales	Investment Required
Sustainability Officer	Year 1 - 2	-

## Estates and Operations: Procurement

Objective 19: Procurement Policy		Benefit
Implementation of a procurement policy across EHU that ensures Sustainability is embedded within the procurement process		Reduction of Scope 3 emissions. Reduction in waste, leading to reduced waste removal costs.
Owner	Timescales	Investment Required
FM Procurement Manager and Sustainability Manager	Year 2 - 3	-

Objective 19b: Printing Strategy		Benefit
Introduce and implement printing strategy to reduce paper use, remove personal printers, monitor printer usage and increase digital content		Economic benefits around moving away from paper use along with environmental benefits and carbon emission reduction for the University
Owner	Timescales	Investment Required
FM Procurement Manager and Sustainability Manager	Year 2	-

## Estates and Operations: Catering

Objective 20: Packaging Audit		Benefit
Undertaking an audit of all packaging used across catering services at EHU, including those used as part of the catering of events as well as products being sold in outlets.		Providing a baseline of packaging use across the campus will allow for a clear strategy to be developed to identify areas where packaging can either be removed, replaced by more sustainable opportunities, or new recycling streams introduced
Owner	Timescales	Investment Required
Catering Manager and Sustainability Officer	Year 2	-

Objective 21: Coffee Cup Recycling		Benefit
Coffee cups are a major source of waste at EHU as we currently do not have a way of recycling any element of them, thus increasing our non-recyclable waste streams and thus costs.		Introducing coffee cup recycling will help reduce costs associated with non-recyclable waste, reduce the amount of waste going to RDF, benefit institutional reputation and reduce carbon emissions.
Owner	Timescales	Investment Required
Catering Manager and Sustainability Manager	Year 1	-

## Estates and Operations: Utilities

Objective 22: Utility Forensic Audit		Benefit
Undertake an audit of the last 6 years utility bills (water, gas and electricity) to establish any over spend and recoup this money. Will also highlight areas where may have potential for savings moving forward		Potential recouping of overspend from past 6 years Identification of areas of risk/overspend to focus on moving forward
Owner	Timescales	Investment Required
Sustainability Manager	Year 1	-

Objective 23: Water Audit		Benefit
Undertake an audit of entire site to establish areas where water savings can be made through changes in processes or installation of new devices.		Economic benefits associated with lowering water use and reducing/preventing water loss in the system. Associated reducing of CO2e emissions.
Owner	Timescales	Investment Required
Head of Estates Management and Sustainability Manager	Year 1-2	-

Objective 24: Building Water Checks		Benefit
Building checks as part of routine maintenance procedures to ensure best practice continues to be followed and when works are undertaken water savings are considered as part of costings. Student awareness programme required to capture water issues such as overflowing toilets.		Economic benefits associated with lowering water use and reducing/preventing water loss in the system. Associated reducing of CO2e emissions.
Owner	Timescales	Investment Required
Head of Estates Management	Year 1 onwards	-

## Learning and Teaching (and Research)

Objective 25: Carbon Literate Organisation		Benefit
<p>EHU aspires to become a Carbon Literate Organisation in recognition of the importance of staff and students in developing skills around understanding carbon literature and implementing best practice around personal and professional carbon reduction measures.</p> <p>Initially investment would be required for a member of the Board of Governors to undertake Carbon Literacy Trust (CLT) training and for the first cohort of staff/students to undertake accredited training. After this the investment proposed would cover the cost of up to 100 students/members of staff attaining CLT training each year. Uptake will be reviewed annually to determine whether additional capacity is required.</p>		<p>Being a Carbon Literate Organisation (CLO) will increase the visibility and reputation of EHU, and also indicates that as an organisation we take education around carbon literacy and the environment seriously at all levels due to the very fact that senior leadership must also undertake the training.</p> <p>Gaining CLO status and providing CLT training will also be beneficial for students looking for roles where understanding climate matters is vital and will be key to student recruitment moving forward.</p>
Owner	Timescales	Investment Required
Operational Risk and Environment Team	Year 1 - 2 (for initial implementation)	-
Objective 26: SustainNET Webinar Series		Benefit
<p>Continuation of SustainNET's online Webinar series covering a range of sustainability themes and open to EHU staff and students and the general public.</p>		<p>Dissemination of research at EHU around sustainability to a wide audience. Reputational and promotional benefits.</p>
Owner	Timescales	Investment Required
SustainNET leadership team	Year 1 onwards	-
Objective 27: SustainNET ESD Team		Benefit
<p>Enhance the application of the United Nations Sustainable Development Goals (SDGs) to the University's Taught Degrees Framework, and thus to curriculum design across the whole campus.</p>		<p>Improvements in ESD will benefit students through providing additional skills around sustainability which are becoming increasingly important in the employment market.</p>
Owner	Timescales	Investment Required
SustainNET leadership team	Year 1-2	-

Objective 28: Curriculum Review		Benefit
Review the content of the curriculum across EHU to benchmark the inclusion of sustainability/environmental issues within modules. This will allow for a better understanding of where there are gaps in ESD that can be addressed to improve uptake.		Improvements in ESD will benefit students through providing additional skills around sustainability which are becoming increasingly important in the employment market.
Owner	Timescales	Investment Required
Sustainability Manager, Faculty leads	Year 2 onwards	-
Objective 29: Postgraduate Studentships		Benefit
Look to grow number of students enrolled on the MSc in Sustainable Leadership and Management, and look to convert graduates from the course into PhD students.		Increased postgraduate opportunities for students at EHU and creation of more research focused on sustainability being generated at EHU.
Owner	Timescales	Investment Required
Business School leadership	Year 2 onwards	Covered by Business School budget
Objective 30: Careers Sustainable Recruitment		Benefit
Move towards a sustainable recruitment strategy that includes: <ol style="list-style-type: none"> <li>1. Reduce wasted consumables at recruitment fairs</li> <li>2. Use recycled and recyclable materials wherever possible</li> <li>3. Encourage the removal of single use items by offering freebies such as reusable bags not made from plastic, drink bottles, coffee cups etc.</li> <li>4. Consider whether an activity can be held online instead of in person to reduce unnecessary travel</li> <li>5. Encourage employers to use public transport or car share when visiting campus</li> </ol>		Reduced waste, leading to reduced waste removal costs. Reputational enhancement
Owner	Timescales	Investment Required
Careers	Year 1-3	-

<b>Objective 31: Graduate Attributes</b>		<b>Benefit</b>
To highlight the importance of sustainability to students it is important that sustainability is included as a graduate attribute.		Promotes the importance of sustainability to EHU graduates.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Careers	Year 1	-

## Partnership and Engagement

<b>Objective 32: Lancashire Community Climate Action Forum (Community Sustainability Forum)</b>		<b>Benefit</b>
An in-person event to be hosted by Edge Hill University in May 2023 involving LA representatives and from other organisations based in Lancashire and wider North West England region.		Highlighting the environmental sustainability work being done in the North West including by EHU and SustainNET partners to a wider audience to move forward the sustainability agenda of the region
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
SustainNET, Corporate Communications	Year 1	-

<b>Objective 33: SustainNET Membership</b>		<b>Benefit</b>
SustainNET had 115 Members by the end of the 2021/22 academic year. We aim to expand this number to around 150 by the end of the 2022/23 academic year. There were 44 Partner organisations that help advance the sustainability agenda both on campus and locally off campus and beyond still further which we aim to expand to 60.		Increased engagement with SustainNET both within EHU and beyond will strengthen our position in the sustainability field in North West England.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
SustainNET leadership team	Year 1	-

<b>Objective 34: CSR Policy</b>		<b>Benefit</b>
Development and implementation of a CSR Policy for EHU to shape engagement with the wider community.		Improved engagement with the local community providing increased support for the community, and also allowing for staff to develop skills
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Commercial Services Manager	Year 1-3	-

# Appendix Two: CMP Objectives

## Energy Reduction

Objective 35: Pipe Lagging		Benefit
Lagging of all hot water pipes to increase thermal efficiency across campus		Increasing thermal efficiency by reducing heat loss from pipes, thus reducing electricity consumption which has a positive impact of decarbonisation and costs Payback: ~1 year
Owner	Timescales	Investment Required
Head of Estates Management	Year 1 onwards	-

Objective 36: Lighting Upgrades		Benefit
Replacement of lighting from fluorescent to LED across campus including in Main Building, Sports Centre, Catalyst, Wilson Centre, FoE and certain residential buildings.		The use of LED rather than fluorescent is not only important for complying with regulations but will also reduce energy consumption, thus lowering our emissions and bills. Over a year a single LED creates 15kg CO2e, while a non-LED bulb can generate up to 300kg CO2e Payback: <3 years for each stage - see Appendix 4 for example of report from completed project
Owner	Timescales	Investment Required
Head of Estates Management	Years 1 - 5	-

<b>Objective 37: Installation of Photocells to External Lighting</b>		<b>Benefit</b>
Upgrade external lighting from manual timeclocks to photocells with LEDs used for lighting		<p>Installation of photocells will remove the need for manual upgrading of the current timeclocks, freeing up time.</p> <p>This work will also improve the energy efficiency of the lights, reducing energy costs and helping reach decarbonisation targets,</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1 - 3	-

<b>Objective 38: BMS Controllers</b>		<b>Benefit</b>
Replacement and upgrade of BMS controllers across campus		<p>Will provide more accurate control of plant equipment</p> <p>Estimated 15% energy saving possible, supporting decarbonisation targets and providing financial savings</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1 - 2	-

<b>Objective 39: BMS Enhancements</b>		<b>Benefit</b>
Enhancing the performance of the BMS across campus		<p>Reduction of energy consumption.</p> <p>Provision of increased insight into building performance, allowing for better targeting of buildings for decarbonisation-based objectives</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 2 - 3	-

<b>Objective 40: Window Upgrades</b>		<b>Benefit</b>
Ensure that any window upgrades/replacements use triple glazing as a preference, with double glazing a minimum. Including planned works for Forest Court		Improve thermal efficiency of buildings, improving staff and student experience. Reduction of energy consumption and therefore costs.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1 onwards	-

<b>Objective 41: FoE Heating</b>		<b>Benefit</b>
Review of the FoE heating systems to ensure are running efficiently, move planned to condensing boilers		Improved working environment for staff and students Will improve energy efficiency.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1	-

<b>Objective 42: FoH Heating and Cooling</b>		<b>Benefit</b>
Review of the FoH heating and cooling systems to ensure are running efficiently, currently the system is not operating as designed with the bore holes and plant needing attention		Improved working environment for staff and students Will improve energy efficiency, driving towards decarbonisation targets
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 1 - 2	-

<b>Objective 43: Automatic Meters</b>		<b>Benefit</b>
Installation of building level automatic metering for all utilities to provide regular meter reads for analysis		Improved oversight of utility use to drive forward new objectives around energy/water use to help reach decarbonisation targets
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 2 onwards	-

<b>Objective 44: Life Sciences Development/Sustainability Tracker</b>		<b>Benefit</b>
Development of a tracker framework to initially capture and track sustainability initiatives implemented as part of the Life Sciences Development. Following this the tracker will be used for future developments and for refurbishment works on campus		Ensures that best sustainable attributes of building design and refurbishment are implemented.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Director of Capital Developments	Year 1 onwards	-

### Decarbonisation

<b>Objective 45: Carbon Tracking System</b>		<b>Benefit</b>
Implementation of a carbon tracking system to centralise data and allow for department across the University to contribute effectively and efficiently		<p>Use of a tracking system de-risks the reporting process by allowing multiple people to access data and will improve the accuracy of reporting, allows for better tracking of data, thus helping adjust targets in a meaningful way.</p> <p>Any system used would also allow for gaps in data knowledge to be accurately estimated using industry standard methods.</p> <p>Accurate carbon tracking will allow for improved external reporting which is important for reputation purposes.</p> <p>Investment in this system will also future-proof EHU when mandatory reporting is introduced for universities.</p>
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Sustainability Manager	Year 1 onwards	-

Objective 46: Heat Decarbonisation Plan		Benefit
Development of Heat Decarbonisation Plan to clearly roadmap how to decarbonise the heating on campus		A HDP will identify actions to decarbonise heating across campus which is important due to the scale of emissions coming from heating on campus. The HDP will provide a starting point for EHU to identify priorities and feed into the wider Estates strategy.
Owner	Timescales	Investment Required
Sustainability Manager	Year 1	-
Objective 47: Degasification of Heating		Benefit
<p>Replace gas heating/hot water systems for electrical alternatives.</p> <p>Future installations and replacements to move to electrical supply rather than gas to support the decarbonisation of campus.</p> <p>This should include Wilson Centre, FoH and FoE.</p>		The switch to electricity-based boilers/hot water systems will allow EHU to move away from gas, thus ensuring that as we bring in more behind the meter renewables, we are more self-sufficient and ready to utilise this electricity to decarbonise the campus
Owner	Timescales	Investment Required
Head of Estates Management	Year 1 onwards	-
Objective 48: Procurement Approved 'Green List'		Benefit
Introduction of a clear strategy that ensures the replacement of any fixtures and fittings across the estate takes environmental factors into consideration. This will be supported by an approved spares list with parts ordered from approved 'green list', initially this will be focused on Estates and Site Services. Will look into also look at developing for IT services.		Streamlining the process of sourcing sustainable products leading to saving time searching options. Setting out clear commitment to sustainability across all Estates operations and embedding it in everyday practices.
Owner	Timescales	Investment Required
Sustainability Manager, Head of Estates Management and FM Procurement Manager	Year 1 onwards	-

<b>Objective 49: Carbon Offsetting</b>		<b>Benefit</b>
Carbon offsetting of emissions while developing strategy and infrastructure further to allow for true decarbonisation of campus		Allow for time to implement infrastructure changes such as more behind the meter renewables.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Sustainability Manager	Year 2 onwards	-

## Renewables

<b>Objective 50: Solar PV Phase One</b>		<b>Benefit</b>
Deployment of PV across campus on buildings with existing infrastructure in place Scoping for additional sites for Solar PV roll-out and feasibility study for battery storage		Reduce dependence on National Grid for electricity. Reduction of Scope 2 emissions.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 2 and 3	-

<b>Objective 51: Solar PV Phase Two</b>		<b>Benefit</b>
Based on scoping work undertaken as Phase One, more solar PV will be installed across campus in suitable locations, may also include battery storage.		Reduce dependence on National Grid for electricity. Reduction of Scope 2 emissions. Payback: depends on whether batteries are installed
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Head of Estates Management	Year 3 onwards	-

<b>Objective 52: Eastern Campus</b>		<b>Benefit</b>
Scoping exercise focusing on Eastern Campus development to implement measures such as GSHP/ASHP. Possibly as part of a partnership agreement		Reduction of reliance on National Grid for power by introducing power supply behind the meter. Reduction of Scope 2 emissions. Payback: 11-12 years depending on scale.
<b>Owner</b>	<b>Timescales</b>	<b>Investment Required</b>
Sustainability Manager	Year 2 onwards	-

Objective 53: Strategic Partnership for Electricity Procurement		Benefit
Undertake energy procurement through a strategic partnership arrangement. Where possible this will include taking opportunities to procure energy from renewable sources.		To better risk manage energy procurement and also to have independent bill verification Payback: n/a
Owner	Timescales	Investment Required
Head of Estates Management and Energy Manager	Year 1 onwards	-

This Delivery Plan includes objectives with an estimated total investment value of £2 million.

# Appendix Three: LED Project

## Energy Saving Calculator Report Example

Below is an example of an energy saving calculator report for an LED replacement project undertaken along on of the corridors in the Main Building.

Reports like this will be generated as part of each lighting upgrade project where LEDs are used to replace other lighting styles. These not only improve our reporting on such projects, but also allow improve our understanding of the return on investment and cost savings.

### Energy Saving Calculator

Use our Energy Saving Calculator for light bulbs to discover how much you could save in money and CO2 emissions using Energy Saving Light Bulbs.

#### Light bulb selection

Old lamp wattage	Replacement lamp wattage	Number of lamps to replace
 35	 25	40

---

#### Your usage \*

Hours per day	Days per week	Weeks per year
10	6	52

---

#### Replacement lamp specifications

Life (hours)	Cost	Your currency
30000	23.00	GBP ▾

---

#### Your energy cost †

£per kWh

0.120



## 29%

Energy saving





Annual cost saving  
**£149.76**

Annual energy saving  
**1248.0kWh**



Cost saving over life of lamps  
**£1440.00**

CO2 saving over life of lamps ‡  
**6324kg**

Return on investment §  
**799**  
days





Share





# Get involved

With the creation of the new Delivery Plan, we'll be exploring opportunities for staff and students to support projects both internally and externally with the community.

Whilst we create the resource for sustainable engagement, we would encourage you all to interact with local organisations and charities to help support your surrounding environment to promote positive change.

For ideas on volunteering visit either the Edge Hill Careers or SustainNET.

# Find out more

 [sustainability@edgehill.ac.uk](mailto:sustainability@edgehill.ac.uk)

 [@EHUSustain](https://twitter.com/EHUSustain)

 [ehu.ac.uk/sustainability](http://ehu.ac.uk/sustainability)



Edge Hill  
University