University of HUDDERSFIELD
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NET-ZERO CARBON EMISSIONS PLAN

Purpose and Context

University of Huddersfield has committed to tackle and manage its contribution towards the climate emergency.

University of Huddersfield will reduce its carbon footprint in operation, both on campus and through the influence of our supply chain. We recognise our contribution towards the climate emergency, both negatively and positively, and will achieve a net-zero carbon footprint whilst minimising the need for off-setting.

This document represents a high-level outline plan for addressing the university's carbon footprint, additional more detailed plans, specifications, and procedures will be developed in due course to deliver the targets, policies, and goals of the university in its ambition to address its contribution towards to climate emergency.

Scope

This plan is relevant to all University operations

1.0 Carbon Emission Targets

The university has established key targets:

a. Net-zero Emissions for Scope 1 & 2 by 2030

b. Net-zero Emissions for Scope 3 by 2045

c. The 2005/06 baseline for Scope 1 & 2 carbon emissions 7,614 tCO2e

d. An absolute emissions reduction target for Scope 1 & 2 to 3,000 tCO2e by 2029/30 in line with the Science Based Targets Initiative (SBTI) 1.5oc trajectory

e. An aim of an 80% reduction in absolute emissions from a 2005/06 baseline by 2049/50 (1,523 tCO2e). Trajectory subject to performance in achieving the 2029/30 SBTI target.

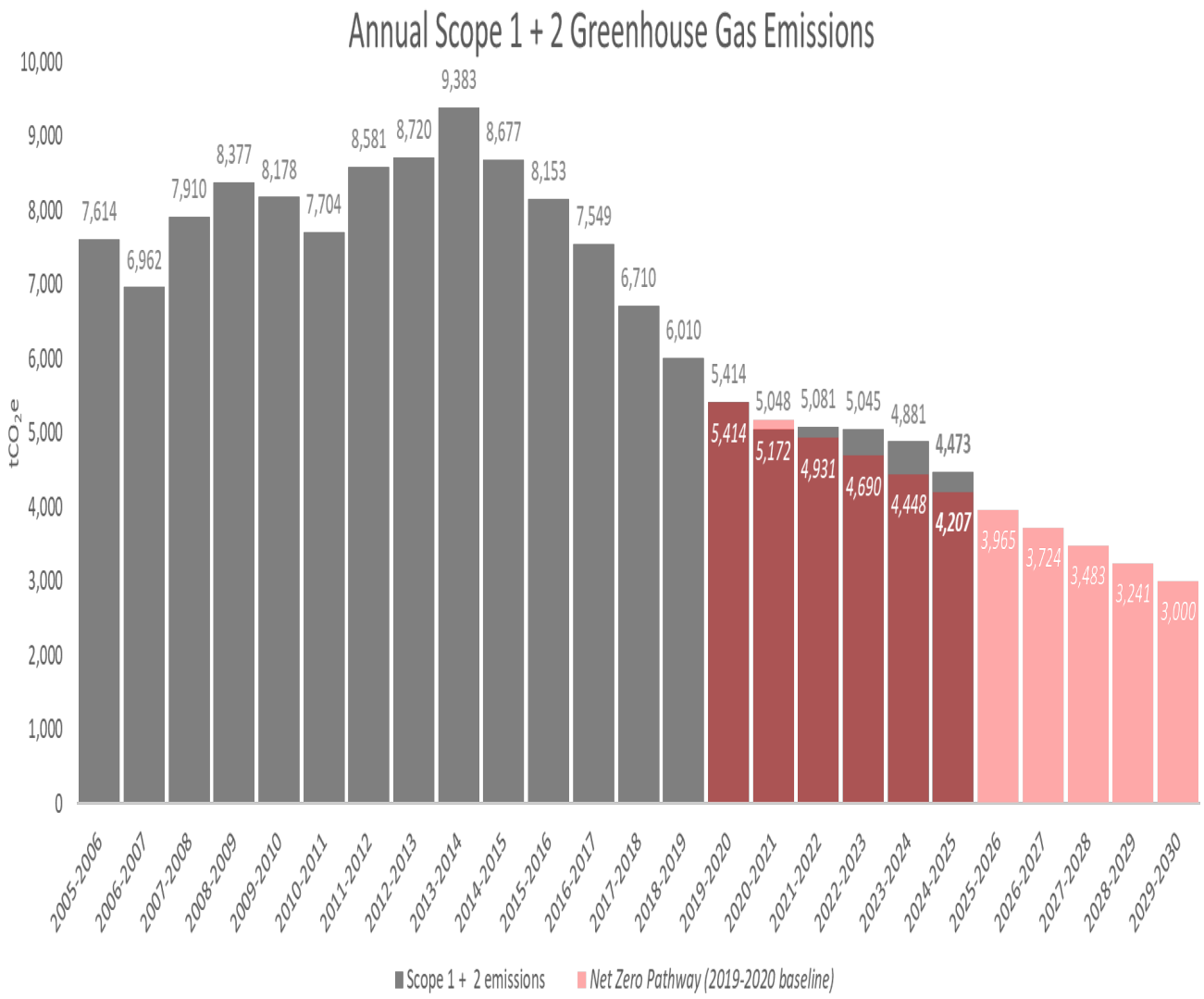
f. These targets are subject to review and amendment by the Carbon Emergency Steering Group (CESG)

2.0 Definitions

a. Scope 1: emissions from sources directly owned or controlled by the university, e.g., use of Natural Gas in generating heat or hot water, use of fuel in vehicles

b. Scope 2: emissions generated by use of energy bought from a utility provider, e.g., electricity consumed via the national grid, or heat supplied through a district heat network not under the universities control

c. Scope 3: emissions occurring from sources that the university does not own or control, e.g., emissions associated with business travel, procurement, waste, and water



3.0 Policy context

This document supports the delivery of the following policies and strategies at the University of Huddersfield:

a. Environmental and Sustainability Policy

b. Carbon neutral strategy: A Ten-Point Plan for the Planet

c. Sustainable Travel Policy

4.0 Governance and reporting

a. The Carbon Emergency Steering Group (CESG) chaired by the Deputy-Vice Chancellor holds responsibility for delivery of the Net Zero Carbon Emissions Plan. The CESG in turn reports to the University Executive and University Council

b. The university will submit data annually to the Higher Education Statistics Agency (HESA) Estates Management Records

c. Progress against targets will be publicly reported annually

5.0 Budget Allocation

a. University of Huddersfield allocates both Capital and Revenue budgets for delivering its carbon management activities

b. Revenue budgets are determined by Estates and Facilities to fund day to day operations of delivering the carbon reduction projects and activities including the staffing of the Sustainability team

c. The 'ECP034 Carbon Budget' capital allocation is approved by the Estates and Finance Committee and the University Council for investment in the university's operations to reduce the carbon footprint

d. The university will inject additional funding into the capital allocation to fund specific projects above and beyond the initial budgets. E.g., the university allocated £10 million towards a first phase of decarbonisation projects for 2024/25 to 2026/27.

Year	2024/25	2025/26	2026/27	2027/28	2028/29	2029/230	Total
Capital allocation (£)	2,000,000	4,200,000	3,800,000	5,000,000	5,000,000	5,000,000	25,000,000

e. In addition, carbon reduction activities may also be undertaken through other capital and revenue funded improvement works e.g., replacement of HVAC systems at end of life.

6.0 Principles of decarbonising Scope 1 & 2 emissions in operations

a. The university will adopt a 'fabric first' approach, improving the thermal performance of our buildings before addressing other factors in a hierarchy of needs

b. The university will improve its efficiency in operation with the principle of designing systems and operations to account for actual need rather than presumption of need. This will entail utilising sensors, data acquisition, and analysis to modify and design systems for greater efficiency. Efficiency of the estates will be measured in the consumption of energy per Gross Internal Area (GIA)

c. Reduction in the use of combustion to provide heat and domestic hot water to take advantage of the decarbonisation of the national electricity grid, whilst reducing air quality emissions

d. Procurement mechanisms including use of Power Purchase Agreements (PPA) to reduce carbon of grid supplied electricity in addition to grid decarbonisation projections

e. Increase the amount of power generation on campus from renewable energy sources

f. There is the potential to access a district heat network established by Kirklees Council if the carbon intensity of the heat provided is significantly lower than the current source of heat in operation on campus

g. Exploration of electrification of heat and hot water production. This includes the use of heat-pumps and the incorporation of electric boilers as technology progresses in carbon and financial whole life costing

h. Removal of R22 refrigerants on campus, continued maintenance of R32 based systems to minimise loses to atmosphere, and implementation of CO2 heat pumps as the technology matures.

i. The university's small fleet of vehicles will continue to transition to electrification as vehicles reach end of life/lease and a suitable EV replacement is available.

7.0 Scope 3 emissions

The university has updated its Scope 3 emissions figures to include emissions from staff and student travel to and from campus.

Category	**GHG tCO_2e, 2023/24**
Supply chain	11829.32
Waste	1.816
Water	5.33
Staff commuting/travel	751.3
Student commuting/travel	5159.8
Scope 3 known total	**17747.57**

8.0 Principles of decarbonising Scope 3 emissions

Work will be undertaken with the procurement specialists in Financial Services, plus other significant stakeholders, to deliver the university's Scope 3 reduction targets.

a. The university will reduce emissions associated with travel through implementing the Sustainable Travel Policy

b. The most effective method of reducing Scope 3 emissions is to reduce the amount of goods and services procured

c. Reuse, refurbishment, and repair of goods is critical in managing Scope 3 emissions. An example would be the repair and reuse of furniture elsewhere within the university, as opposed to disposal of items and replacement with new manufactured from virgin materials

d. The carbon impact of new goods and services should be factored into the decision-making process to determine what shall be procured

e. The university will encourage suppliers to decarbonise their goods and services

9.0 Next actions

a. Develop a second phase of the decarbonisation plan to be integrated into the campus masterplan for delivering net-zero emissions in Scopes 1 & 2 on the existing estates and future developments

b. Undertake further analysis of the university's supply chain to identify opportunities for reducing its Scope 3 emissions footprint

Policy sign-off and ownership details	
Document name	Net Zero Carbon Emissions Plan
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Equality impact assessment	
Approved by	Estates and Facilities senior management team
Date approved	June 2025
Next review due by	June 2029
Author	Sustainability Manager
Owner (if different from above)	Carbon Emergency Steering Group
Document location	https://www.hud.ac.uk/media/policydocuments/Net-Zero-Carbon-Emissions-Plan.pdf
Compliance checks	Progress reporting to Estates and Finance Committee
Related policies/procedures	Environmental and Sustainability Policy Carbon-neutral Strategy: A Ten-point Plan for the Planet Sustainable Travel Policy Sustainable Food Policy

Revision history			
Version	**Date**	**Revision description/summary of changes**	**Author**
1.0	May 2018	First major redraft under the new policy framework	Carbon and Energy Reduction Officer
2.0	May 2022	Major redraft to incorporate revised organisational targets and policies	Carbon and Energy Reduction Officer
3.0	June 2025	Minor redraft to update sustainability performance data	Sustainability Manager