

Addendum to Carbon Net Zero Strategy 2020-2030 – April 2023

The University launched the Carbon Net Zero Strategy 2020-2030 in October 2021. The strategy has become embedded in the day to day activities of the organisation and considerable progress has been made both towards the actual targets but also in our understanding of how to achieve these, supported by cross-campus decarbonisation plans. This addendum supports implementation with additional activity-specific information and signposting to cross policy alignments that support delivery.

1. Additional information to specify carbon emissions reductions required per scope

Scope	18-19 baseline	Net Zero 2030 target	
	CO ₂ emitted Tonnes	CO ₂ emitted Tonnes	% reduction
Scope 1	1,025	687	33%
Scope 2	1,121	762	32%
Scope 3 - Staff/student commute	4,730	4,588	3%
Scope 3 - Procured services	8,206	5,416	34%
Total (all scopes)	15,082	11,183	26%

2. Activity specific targets included within Scope 3 emissions reduction objectives and their policy alignments supporting delivery

Activity	18-19 baseline	Net Zero 2030 target	
Waste (including construction waste) arisings	1.83 Kg CO ₂ /FTE	1.41 Kg CO ₂ /FTE	23% reduction
Water consumption (incl. waste water treatment)	8.12 Kg CO ₂ /FTE	7.14 Kg CO ₂ /FTE	12% reduction
Staff and student business travel	30.27 Kg CO ₂ /FTE	TBC	TBC

Targets to support Scope 3 reductions have been incorporated into the Sustainable Travel Plan 2023-2028, Waste Policy 2023–2028 and update to Procurement Strategy 2020-2023.

Target-setting for staff/student business travel will be reviewed by the Net Zero taskforce based on analysis in 2023. Student travel from home to university is an area of stakeholder interest under review for inclusion in Scope 3 and has a baseline for 2018-19 of 1204T.

3. Scope 1 and 2 baselines for residential and non-residential estate

Property use	18-19 baseline		% of overall CO ₂ emissions	
	Scope 1	Scope 2	Scope 1	Scope 2
Non-residential	818 T	958T	5.4%	6.4%
Residential	207 T	163T	1.4%	1%

Residences at Pittville Student Village are covered by a lease agreement. This is included with the Scope 3 Procurement emissions targets. The emissions baseline (baseline year is 20-21 as 18-19 baseline data are not available) and targets are as follows:

Pittville Student Village	20-21 Scope 3 baseline	% of overall CO₂ emissions
Residences	638T	4.2%
Non-residential	108T	0.7%

Overall emissions from our residences (UoG and PSV) account for 6.6% of all UoG emissions.

4. Historical carbon emissions trajectory, combining progress since 2005 with Carbon Net Zero Strategy objectives

We are able to track our performance in line with global targets to reduce carbon emissions, compared to historic emissions and across the previous Carbon Management Plans.

	2005 baseline	2020 milestone target and actual		2030 Net Zero milestone target		2050 Target	
Scope 1 & 2 combined emissions	5004T in 2010-20 Carbon Strategy	Target 3002T	Target 40% reduction	1,449T	71% reduction	1001T	80% reduction
		Actual 1955T	Actual 61% reduction				

1990 baseline emissions for Scope 1 & 2 was 5,640T (see Carbon Strategy 2010-2020). The Science Based Targets Initiative requires 80% reduction against this baseline by 2050. UoG Carbon Net Zero Strategy aims to deliver a 71% reduction against the 1990 baseline, which would deliver positive progress towards an 80% reduction by 2050.

5. Cross-campus Heat Decarbonisation Plan

The University worked with ARUP to deliver a Heat Decarbonisation Plan funded by the Low Carbon Skills Fund in 2023. It intends to use this Heat Decarbonisation Plan as a technical, costed roadmap demonstrating potential routes towards Net Zero.

The UoG Carbon Net Zero Strategy 2021-2030 remains the principal strategy document guiding the University's actions to reduce carbon emissions towards a "net zero" position by the most cost-effective route. The Carbon Net Zero Strategy is an ambitious plan that sets challenging CO₂ emissions reductions targets requiring significant finance and resource commitments to support delivery. This Heat Decarbonisation Plan outlines Scope 1 and 2 emissions reduction project opportunities, to scope additional potential reductions, albeit requiring additional sources of investment. The University remains committed to achieving Carbon Net Zero by 2030 and will annually review and monitor its optimal technological and financial pathway towards this aim. This will include an assessment at mid point of the strategy, to review changes to the estate footprint and university activities, costs and options for carbon offsetting, coupled with externally driven uncertainties. That review point will provide the opportunity to review progress against targets, residual emissions, offsetting costs, and any changes of policy direction needed. The Heat Decarbonisation Plan includes supporting documents that enable the estimated carbon reductions, cumulative emissions and associated project costs to be updated in alignment to this review."