



University of
Salford
MANCHESTER

Sustainable Construction Policy Statement

Version Number 4.2

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Author: Assistant Director of Sustainability

Document Control Information			
Status and reason for development			
Live document to detail and embed updated University and Salford Crescent Masterplan Sustainability Objectives			
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Author	Summary of changes	Version	Authorised & Date
R.Bennett	<i>Updated biodiversity design principles & actions and added further reference to inclusivity in Quality Places. Added student residential targets.</i>	V4.2	University Sustainability Board 15.01.2024 Strategic Portfolio Board 13.03.2024
R.Bennett	<i>Updated responsibilities</i>	V4.1	
R.Bennett	<i>Review and updated to include current University and Salford Crescent Masterplan Objectives and sustainability governance changes</i>	V4.0	
R.Bennett	<i>Reviewed and updated (minor amendment only)</i>	V3.2	N/A 1 st July 2020
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R. Bennett	<i>Document created</i>	V1.0	Sustainability Board, October 2011
Policy Management and Responsibilities:			
Owner:	This Policy is issued by the Assistant Director of Sustainability, who has the authority to issue and communicate policy on sustainable development.		
Others with responsibilities (please specify):	All subjects of the Policy will be responsible for engaging with and adhering to this policy.		
Have you completed formal assessment with the following advisory teams:			
Equality Analysis (E&D, HR) Equality Initial assessment form	1. <i>Any policies and procedures developed as a result of this will be subject to an initial equality assessment.</i>		
Legal implications (LPG)	2. <i>N/A</i>		
Information Governance (LPG)	3. <i>N/A</i>		
Student facing procedures (QMO)	4. <i>N/A</i>		
Consultation:			
Staff Trades Unions via HR Students via USSU Relevant external bodies (specify)	1. <i>N/A</i>		
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Environmental Sustainability website, Environmental Sustainability Estates staff induction, Invitation to Tender Packages for Projects			

1.0 Purpose

The intention of this document is to inform and inspire the sustainable design of developments at the University of Salford.

The University of Salford recognises the global climate crisis and that climate change is one of the biggest challenges facing our society across the globe. As a higher education provider we have a major role to play in enabling our students and staff to respond positively to global challenges. We also recognise our responsibilities to reduce our negative impact on our environment and our opportunity to demonstrate environmental sustainability through our operations and using our campus environment as a living laboratory.

Our Environmental Sustainability Policy and Plan defines our commitment to mitigating climate change, being resource efficient and contributing towards sustainable development through the operation of our campus and how this will contribute to education and research for sustainability. Our Plan formalises our commitment to becoming Net Zero Carbon (NZC) by 2038, with an interim target of an 81% reduction in scope 1 and 2 emissions by 2030 (from 2005/6 baseline).

This document details the objectives for sustainable development, our design principles and how we will monitor and review progress.

2.0 Scope

This Statement applies to all members of the University community including (but not limited to): Students; Staff; Contractors and Associates carrying out work on behalf of the University.

3.0 Responsibilities










Role	Responsibilities Summary
Estates Leadership Team	<ul style="list-style-type: none"> • Sets tone, approves strategy, reviews project team progress and agrees major derogations/ appropriate mitigation in conjunction with the UoS Sustainability Office • Overall responsibility for compliance and audit
Sustainability Office	<ul style="list-style-type: none"> • Sets overarching requirements/agrees any variations • Provides steer and assurance • Oversees assessment and audit process/monitors process • Agrees derogations where appropriate • Requires provision of performance data for reporting purposes • Represented on each Project Board
Estates Environmental Sustainability Team	<ul style="list-style-type: none"> • Works closely with Project Managers to ensure that project sustainability requirements are included in all relevant project documentation – from brief/business case through to tender and contract documents • Attends design team meetings as required and sustainability meetings/workshops at regular intervals during the project lifecycle
University Project Manager/ External Project Manager	<ul style="list-style-type: none"> • Must be familiar with the requirements of the UoS Sustainable Construction Policy and Energy Design Standard • Ensures that project sustainability requirements are included in all relevant project documentation – from brief/business case through to tender and contract documents • Ensures that correct assessment methodologies and standards are applied to the project • Appoints Sustainability and Energy Consultants; BREEAM/ Ska assessor; and specialist consultants, as required (confirm with Sustainability Team)

	<ul style="list-style-type: none"> • Ensures that the project design and implementation teams are fully aware of their responsibilities with regard to meeting the required standards, and providing appropriate evidence. • Arranges sustainability meetings/ workshops at regular intervals during the project lifecycle.
Sustainability Champion/Consultant /BREEAM or Ska Assessor	<ul style="list-style-type: none"> • Must be appointed no later than RIBA 1 for new build and major refurbishment projects • Ensures that the project is delivered in accordance with the UoS Sustainable Construction Policy and Energy Design Standard • Facilitates sustainability workshops; assigns team responsibilities; sends team reminders; and provides regular written updates. • Highlight scope gaps/additional specialist appointments that are required • Submit sustainability performance reports at each RIBA Stage (1-7) • Provides advice and guidance on the sustainability objectives and assessment process to the design and implementation teams • Challenges the project team to optimise sustainable design and construction, particularly in any value engineering • Reviews and manages documentary evidence to confirm implementation • Manages formal certification process (BREEAM/ Ska) • Identifies additional opportunities for exemplar practice/ innovation
Project Design Team	<ul style="list-style-type: none"> • Reviews relevant sections of the SBS to confirm that all requirements can be met; raise derogations where necessary • Supports the project manager and sustainability consultant in identifying relevant sustainability criteria to target on the project • Reviews discipline-specific requirements of the sustainability assessment (BREEAM/ Ska) and highlights compliance risks and additional opportunities • Ensures that requirements are incorporated clearly into design and specification documentation • Attends sustainability review meetings • Where necessary, prepares additional evidence documents to support the formal assessment process
Project Implementation Team (contractor)	<ul style="list-style-type: none"> • Reviews targeted sustainability criteria, specification and contract documents to ensure requirements can be met in practice • Raises risks and additional/ alternative opportunities as early as possible • Ensures that targeted criteria are met in the event of product substitutions or design changes • Organises regular sustainability review sessions • Provides evidence of compliance to the sustainability consultant
Cost Consultant	<ul style="list-style-type: none"> • Ensures budgeting and value engineering exercises account for the life cycle benefits of investing in sustainability initiatives • Account for value of existing building materials • Where required, carry out formal life cycle costing analysis (with input from Sustainability Consultant)
Specialist Appointments	<ul style="list-style-type: none"> • Certain indicators require expert knowledge to successfully deliver. It may be necessary to appoint specialist consultants.

4.0 Sustainable Design Brief

4.1 Objectives:

The University of Salford has committed to the following objectives for University developments to support the University Environmental Sustainability Plan and Salford Crescent Masterplan Sustainable Development Strategy.

	Net Zero Carbon	To be net zero carbon on construction and in operation	<ul style="list-style-type: none"> Passive design optimisation Operational energy intensity Upfront embodied carbon 	<ul style="list-style-type: none"> Whole Life Carbon On-site energy generation
	Sustainable Transport	To transition to active and sustainable transport with greater local and regional connections	<ul style="list-style-type: none"> Transport diversity, prioritising active travel Accessibility 	<ul style="list-style-type: none"> Location efficiency Distances to amenity
	Climate Resilience	To be as resilient as possible against the impacts of climate change, adapting to our changing world	<ul style="list-style-type: none"> Building and infrastructure resilience Adaptation strategies Surface water run off 	<ul style="list-style-type: none"> Drainage capacity Avoidance of overheating
	Sustainable Water Management	To conserve and reuse water onsite and strive towards water positive	<ul style="list-style-type: none"> Construction water use Operational water use 	<ul style="list-style-type: none"> Water recovery Efficient fittings
	Zero Waste/ Circular Economy	Eliminating waste and improving resource efficiency through circularity	<ul style="list-style-type: none"> Prioritising reuse over rebuild Limiting construction waste Maximise diversion from landfill Design for adaptability and deconstruction 	<ul style="list-style-type: none"> Adoption of incentives to reduce single use plastic Procurement of ethical and responsibly sourced materials Utilise materials with high recycled content
	Biodiversity	Delivering a net gain in biodiversity, whilst providing high quality green spaces	<ul style="list-style-type: none"> Biodiversity net gain Urban Greening Factors Food growing/community allotments 	<ul style="list-style-type: none"> Percentage of soft landscaping Percentage of native species
	Quality Places	Creating communities that have a strong sense of place and identity, maximise shared value, and that delight	<ul style="list-style-type: none"> Place making Quality streets Quality of public realm 	<ul style="list-style-type: none"> Clean air Access and linkages
	Health and Wellbeing	Deliver high quality spaces where people can live, work and thrive while positively impacting their physical and mental health	<ul style="list-style-type: none"> Access to daylight and view out Indoor air quality Internal acoustic comfort Internal thermal comfort 	<ul style="list-style-type: none"> Promotion of physical exercise Connection to nature Mental wellbeing
	Social Value	To have a positive impact on the local community and significantly increase social value	<ul style="list-style-type: none"> Local short term and long-term employment Educational visits Provision of internal and external community space 	<ul style="list-style-type: none"> Hosting of employment workshops Procurement of local materials Farmer markets

4.2 Indicators, Targets, Design Principles and Actions:

The Key Performance Indicators are highlighted in blue in the table below. The other indicators are required to be measured, minimum performance complied with and aspirational measures, where detailed, targeted. All metrics should be reported against to evaluate success in meeting the Sustainable Design Brief at each RIBA Stage. Targets specific to student residential projects where they differ are denoted in italics and Res.

Themes	Objective	Indicators	Unit	Minimum Performance	Aspiration	Design Principles and actions
Net Zero Carbon	To be net zero carbon on construction and in operation	Upfront embodied carbon of construction (A1-A5)	KgCO ₂ e/m ² [GIA]	<700 (<500 Res)	<500 (<300 Res)	<ol style="list-style-type: none"> 1. Prioritise retrofit of existing buildings and building reuse 2. Undertake a Whole Life Carbon assessment in accordance with the RICS methodology 'Whole Life Carbon Assessment for the Built Environment' at every stage of the design process and verify on construction the upfront embodied carbon emissions using manufacturer's EPDs for all materials. Offset all residual carbon emission in accordance with the University and Masterplan offsetting guidance strategy. 3. Undertake a low and zero carbon feasibility study to maximise LZC utilisation on site 4. All sites to be combustion free, using 100% certified good quality renewable energy 5. Undertake an operational energy assessment in accordance with the Passive House Planning Package (PHPP), Design for Performance or CIBSE TM54 at every stage of the design process and verify in-use using actual metered performance data 6. Develop a detailed metering strategy to enable the collation, storage and reporting of all in use operational energy data, in accordance with CIBSE TM39: Building energy metering 7. Prioritise maximum use of onsite renewables appropriate to context 8. Install photovoltaic panels on all available roof areas for on-site electricity generation 9. Undertake preliminary EPC modelling and optioning to ensure all elements achieve A rated EPCs on construction 10. Prioritise Fabric First principles for building form and envelope 11. Prioritise low embodied carbon and healthy materials, minimise materials with high embodied carbon 12. Fine tune internal environment with efficient mechanical systems 13. Provide responsive local controls 14. Specify ultra-low energy appliances 15. Specify ultra-low energy IT 16. Demonstrate additionality of offsite renewables
		Operational Energy Intensity (B6)	KWh/m ² /year [GIA]	<70 (<50 Res)	<55 (<35 Res)	
		Whole Life Carbon (A1-C4)	Kg/CO ₂ e/m ² [GIA]			
		Space heating demand	KWh/m ² /year [GIA]			
		Percentage of on-site electricity generation	%			

Sustainable Transport	To transition to active and sustainable transport with greater local and regional connections	Public Transport Accessibility Index	AI			<ol style="list-style-type: none"> 1. Produce a sustainable and active travel plan for the site or consider, support and contribute to the University Sustainable Travel Plan at the concept design stage to inform the design 2. Prioritise high quality Digital Connectivity to avoid the need for unnecessary travel 3. Prioritise site selection with good proximity to public transport 4. Provide high quality pedestrian and cycle links to local amenities 5. Provide end of journey provision for active travel walkers, runners and cyclists (shower, lockers, cycle parking/storage) 6. Provide infrastructure for electric vehicles as a priority 7. Provide suitable onsite personal storage
		Local efficiency and distance to amenity	Walk score			
		Percentage of EV active charging spaces	%	50%	100%	
		Cycle Parking	Per occupant	10%	20%	
Climate Resilience	To be as resilient against the impacts of climate change, adapting to our changing world	% of climate risks reduced to low risk	%	90%	95%	<ol style="list-style-type: none"> 1. Commission climate change risk and adaptation appraisal and action findings to reduce risk at the concept design stage 2. Make allowance for the increased space and weight of cooling plant which may be required in the future 3. Undertake overheating analysis for all occupied areas using 2050 and 2080 weather files 4. Create Sustainable Urban Drainage that supports natural aquatic habitats 5. Consider the use of Nature Based Solutions in climate change mitigation and adaptation
		Building & infrastructure resilience	Emission scenario			
		% improvement of surface water runoff rate before and after development	%	>50%	Greenfield runoff	
		Drainage capacity (attenuate)	m ³			
		Area of public realm (amenity space) shaded	%	20%	30%	
		Peak electrical demand from each plot every hour	kW			
Sustainable Water Management	To conserve and reuse water onsite and strive towards water positive	Operational potable water consumption	Litres/person	<30 (<105 Res)	<20 (<75 Res)	<ol style="list-style-type: none"> 1. Review opportunities for water efficiency to meet or exceed % reduction targets 2. Provide low flow fittings and appliances 3. Provide waterless appliances where possible 4. Provide leak detection 5. Provide rainwater recycling and attenuation. Consider greywater recycling.
		Construction potable water consumption	m ³			
		Percentage of water usage from water and/or rainwater	%			

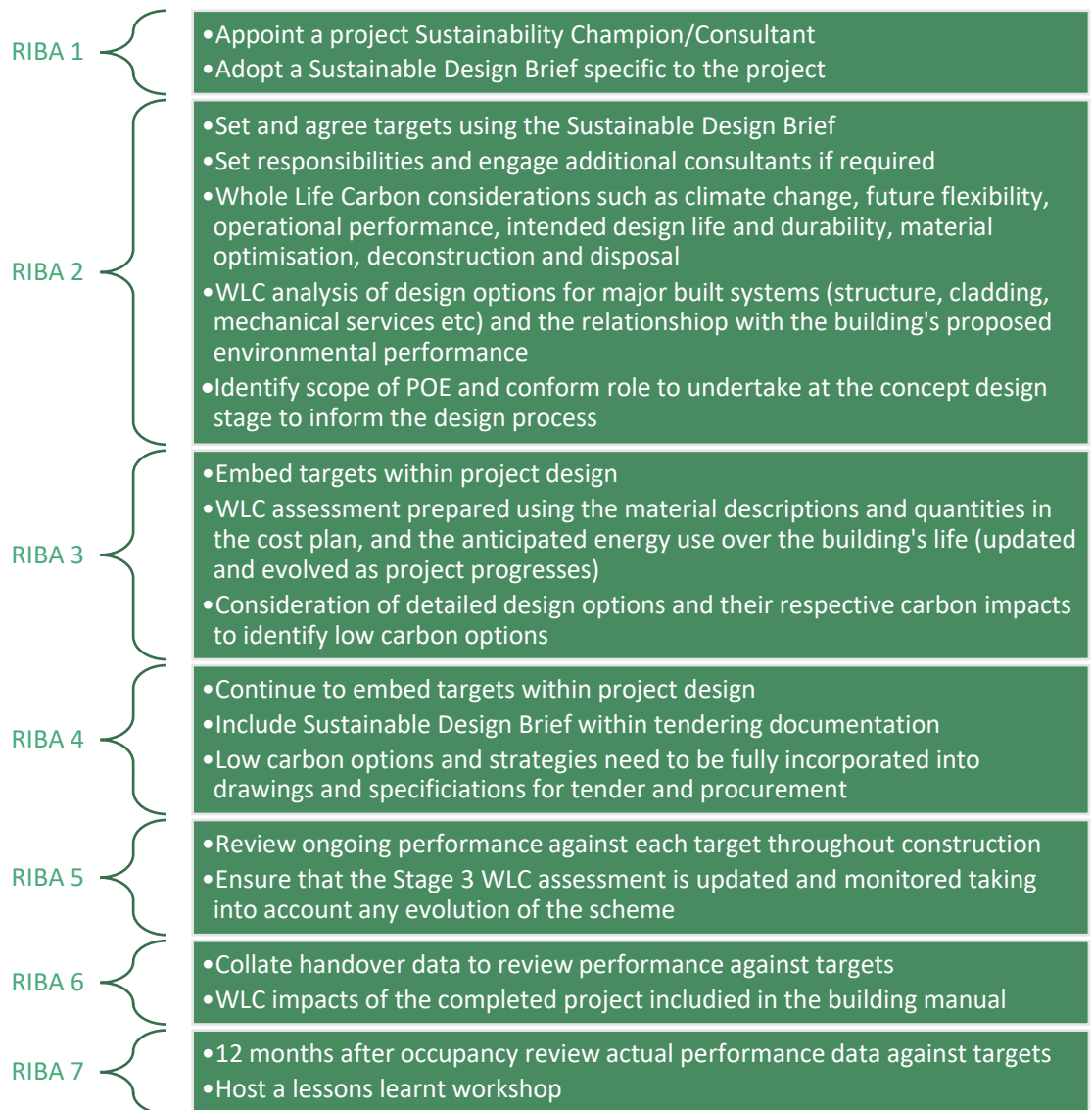
Zero Waste	Eliminating waste and improving resource efficiency through circularity	Construction total quantity of non-hazardous waste arising	Tonnes/100m ² [GIA]	≤3.2	≤1.9	<ol style="list-style-type: none"> 1. Maximise construction waste diverted from landfill 2. Design for materials optimisation 3. Consider modular off-site construction systems 4. Design for adaptability and deconstruction 5. Design building for disassembly and the circular economy 6. Produce Operational Waste Management strategy for each site 7. Develop a circular economy strategy at the concept design stage 8. Prioritise ethical and responsible sourcing of all building elements 9. Promote use of local natural materials 10. Detailing to be long life and robust 11. Ensure that any value-engineering is not simply a cost-cutting exercise, ensure ongoing operational and maintenance cost implications and potential impact on sustainability performance is considered
		Construction non-hazardous waste diverted to landfill	%	90%	95%	
		Cement replacement – cast in-situ concrete substructure	%			
		Cement replacement – cast in-situ concrete superstructure	%			
		Cement replacement – pre-cast concrete	%			
		Recycled content – structural steel	%			
		Limit single use plastics during operation	No. of initiatives			
Biodiversity Net Gain	Delivering a net gain in biodiversity, whilst providing high quality green spaces	Net gain in biodiversity	% improvement	25%	50%	<ol style="list-style-type: none"> 1. Leave a site in better 'regenerative' ecological condition than before development - maximise the onsite Biodiversity Net Gain utilising Natural England's Biodiversity metric 4.0 2. Prioritise building and site re-use 3. Prioritise brownfield site selection 4. Carry out sustainable remediation of site pollution 5. Retain existing natural features 6. Create arrange of green spaces (green roofs, vertical greening, pocket parks, green corridors) 7. Create habitats than enhance biodiversity 8. Create 'productive' landscapes for urban food production 9. Zero local pollution from the development
		Area of high quality green space	% of development footprint			
		Urban Greening Factor	UGF			
Quality and Inclusive Places	Creating communities that are inclusive have a strong sense of place and identity, maximise					<ol style="list-style-type: none"> 1. Develop place making and cultural strategy with stakeholders 2. Prioritise placemaking that expresses identity and territory 3. Create secure places with overlooking views 4. Create places for social interaction 5. Create vibrant mixed-use places 6. Provide high quality pedestrian public realm 7. Create inclusive places for community interaction

	shared value and that delight					
Health and Wellbeing	Enhancing health and wellbeing through sustainable placemaking	Post Occupancy Evaluation	% of people satisfied	>70%	>80%	<ol style="list-style-type: none"> 1. Provide spaces with strong visual connection to outside 2. Provide responsive local controls, e.g. opening windows or local control of HVAC systems 3. Design spaces with appropriate occupant density for activity 4. Design spaces with good indoor air quality 5. Design spaces with good indoor daylighting, lighting and glare control 6. Design spaces to adaptive thermal comfort standards 7. Design spaces with good acoustic comfort 8. Design spaces that are inclusive and universally accessible 9. Prioritise active circulation routes, e.g. stairs, cycling provision and walking routes 10. Provide indoor and outdoor planted spaces
		Indoor air quality at handover – PM2.5	µg/m ³ (over 24hr period)			
		Thermal comfort	% Time Out Range			
		Internal ambient noise level	dB LAEQ,T			
Social Value	To have a positive impact on the local community and significantly increasing social value	Social Return On Investment (SROI)	£ invested per £ benefit	£2	£4	<ol style="list-style-type: none"> 1. Review social/shared value and Social Return on Investment to identify financial contributions to society of the development 2. Maximise the social return on investment 3. Provide high quality permeable links to social amenities 4. Prioritise local workforce 5. Provide apprenticeships/traineeships 6. Provide educational opportunities from the development
		Provision of community facilities	m ²			
		Total site workforce from the Salford area	%			
		Total site workforce from Greater Manchester area	%			
		Apprenticeships/traineeships	Number/£100,000 construction cost			
		Educational visits to sites or Project team visits to local schools	No.			

4.3 Process

4.3.1 RIBA Stage requirements

The figure below details some of the key actions at each RIBA stage to ensure effective consideration and incorporation of the Sustainable Design requirements. All metrics should be reported against to evaluate success in meeting the Sustainable Design Brief at each RIBA Stage.



4.3.2 Supporting tools

Environmental Assessment Tools

To support delivery of these objectives, the University uses recognised industry standards to provide a supporting framework for the robust and auditable environmental assessment. These frameworks should not be used in isolation and project sustainability considerations should include the broadest possible range of appropriate measures to meet the previously detailed objectives. The University requires all new building and major refurbishment projects to be assessed under formal sustainability schemes such as the Building Research Establishments (BREEAM) and Ska methodology to ensure energy efficiency and sustainability is maximised. A target for all new buildings and major refurbishments to achieve an "Excellent" BREEAM rating with a minimum of "Very Good" where they are justifiable reasons why excellent cannot be achieved. For smaller refurbishments, depending on the scale of the project, we aim for a SKA rating of Gold.

The following targets for Environmental Assessment tools will be applied to projects based on their construction value:

New build	Standard New Build BREEAM 'Excellent' with an aspiration of achieving 'Outstanding'
Major refurbishment (£1M+)	Ska 'Gold' or BREEAM Refurbishment and Fit-Out 'Excellent'
Small refurbishment (£250k - £1M)	Mini Ska
Minor works/Maintenance projects (£25k - £250k)	University of Salford Energy Design Standard

The decision to proceed with the particular scheme and rating (BREEAM/Ska) will be made following a feasibility stage cost and benefits analysis. As a minimum ALL projects should meet the University of Salford Energy Design Standard.

Soft Landings

The University also requires that the Soft Landings process must be used to inform project planning and to ensure that buildings are set up to perform at optimum levels from handover stage and throughout their lifetime. This needs to be planned from the start of RIBA Stage 2.

Post Occupancy Evaluation

Identify scope of POE and conform role to undertake at the concept design stage to inform the design process.

5.0 Reporting and Performance Tracking

At the end of each stage, a report should be created which details the performance against the Sustainable Design Brief. If targets are unattainable this should be highlighted to the client team with documented reasoning and evidence as to why. The client team will then review and provide feedback

Performance should be reported against all indicators with the levels of compliance met depending upon the scale of the work.

BREEAM and SKA tracking, where appropriate, should be included as a sub-section of the overall report on the Sustainable Design Brief.

6.0 Related Documentation

This document should be read in conjunction with the following documentation, which can be found on the [Environmental Sustainability website](#) or requested from the Environmental Sustainability Team:

[University Sustainability Strategy](#): Environmental Sustainability Plan, Policies etc

[University Energy, Water and Carbon Plan](#) (Net Zero Carbon roadmap currently being developed)

University Energy Design Standard (see separate document) (due to be reviewed 23/24)

University of Salford Estates Sustainable Purchasing Procedure – requirement for consideration of environmental sustainability in all purchasing decisions and minimum of 10% weighting for environmental sustainability in evaluation of tenders

[University Sustainable Travel Plan](#)

[University of Salford Landscape Management Plan](#)

[University of Salford Waste Management Plan](#)