## Environmental Sustainability Plan 2023 - 2025

Theme	Objective and Targets	How	Individual/s Responsible	Timeline	Statues
Energy	Objective: Achieve net zero emissions across scope 1, 2 and 3.  Targets:  Reduce emissions to achieve net zero carbon emissions by 2040 across scopes 1, 2 and 3.  Interim target commitment to align with the Northern Ireland target, reducing carbon emissions by 48% by 2030 across Scope 1 and 2 emissions.  Further alignment will be undertaken to ensure the UK National target of 78% reduction in UK emissions by 2035 is achieved.	Development of a bespoke net-zero carbon targets for QUB to cover scope 1, 2 and 3, carbon off-setting, climate change adaptation and associated costed action plan has taken place. They were created in partnership with appointed consultants (ARUP) in early 2023 following the completion of a Net Zero Engagement Campaign.  Identification of schemes by Decarbonisation Working Group and Energy Manager/Officers.  Assessments ongoing around the implementation of renewable technologies (solar/PV panels, air-source heating).  A Green Revolving Fund (GRF) that finances the capital expenditure associated with energy efficiency projects has been present since 2009.  Savings from the projects are ring fenced and returned to the fund hence enabling the fund to grow and finance future projects. The GRF now stands	Head of Sustainability  Estates Manager (Energy)  Assistant Estates Manager (Energy)	Ongoing	Queen's University Net Zero Plan launched in October, following sign-off by Senate in June.  Several energy efficient projects have been approved and are due for completion:  2023/24 Projects:  • Feasibility study on solar PV on accommodation – BT9 site  • Core estate lighting replacement  • Whitla Hall solar PV  • Maths & physics teaching centre – solar PV  2024/25 Projects:  • Air source heat pump – architecture building  • Ashby building solar PV

		at around £2 million and typically finances projects to the value of £175k each year.			
Sustainability Engagement Programmes	Objective – deliver phased lab sustainability programme across the university.  • 2021/22 (pilot phase) - 12 labs;  • 2022/23 33% of all labs,  • 2023/24 66% of all labs,  • 2024/25 100% of all labs.	Identification of existing labs, targeted recruitment from the bottom up and top down, recruitment of an Academic Lead. Investment in the structured, accredited programme LEAF (Laboratory Efficiency Assessment Framework) providing staff and students with guidance and support in minimising emissions.	Head of Sustainability  Environmental Manager  Project Support Officer (Sustainability)  Assistant Sustainability Officer	Ongoing – launched in October annually	In 2021/22 12 Labs received Bronze LEAF Accreditation. A review to determine eligible labs was completed in 2022. In November 2022, the Faculty of Medicine, Health and Life Sciences committed to all their eligible labs becoming LEAF Accredited by 2025. A total of 31 labs received accreditation in 2022/23. A total of 68 labs were recognised in 2023/24. The programme will relaunch in October 2024 and will include Lab Sustainability Training in January.
	Objective – development of a new staff programme that enables faculty's/schools/directorates to create their own Climate Action Plans.  Targets:  Implement a pilot scheme in Sept 2024 to Faculty's as part of their Departmental Planning Process	Review of existing programmes, investment in supporting software, branding of programme, recruitment from top down.		Launch in September 2024	Review of programmes was completed, and plans were signed off by the Sustainability Engagement and Communications Working group in June 2024.  Currently liaising with software provider to ensure programme is launched in September 2024.
	Objective – increase carbon literacy levels across the University.  • Phase One - 2021/22 - delivery to 200 students.  • Phase Two – 2022/23 - 400.  • Phase Three – 2023/24 - 800.  • Phase Four – 2024/25 - 1000	Promotion of CLT to educational administrators, academics and SU. Roll out of free staff and student training sessions throughout the year to maximise opportunities.		Ongoing – launched in September annually	Ongoing discussions are taking place with relevant academic staff and dates will be agreed with facilitators (Keep Northern Ireland Beautiful). Academics from a range of disciplines are involved – School of Biological Sciences, School of Natural and Built Environment, School of Dentistry, School of

Objective – Provide funding source for students and staff to delivery their own sustainability projects on campus  • Fund £20k of projects over 12 months within the academic year	Update Green Fund resources, organise communications and launch in September annually.	Ongoing – launched in September annually	Medicine, School of Management and School of Aerospace and Engineering.  Figures:  2021/22: 305 students, 35 staff  2022/23: 423 students, 112 staff.  2023/24: 1002 students, 74 staff  Dates for 2024/25 are currently being organised with school's and facilitators.  Relaunched every September, with money allocated by November. Figures:  2019: 22 projects  2020/21: 25 projects  2022/23: 18 projects  2023/24: 19 projects  2023/24: 19 projects  2023/24 projects included a range of student events, a litter pick along the Lagan, a mural as part of the UPSURG Project and a wormery.  Green Fund will relaunch in September 2024.
Objective – Integrate sustainability activities within existing courses  • Engage with 200 students through existing courses	Continue to engage with academics and course coordinators to ensure sustainability is embedded in key areas throughout campus.	Ongoing	Engagement activities have taken place with the following courses over 2023/24:  MSc Construction Management (100 Students)  Future Ready Skills for Leaders Programme (50 students)  Future Ready Skills for Leaders Programme – New York (25 Students)  Welcome Sustainability Talks (400 students)  Net Zero PGCert (12 Students)

	Objective – Undertake a rolling calendar of events, campaigns and communication pieces.  • European Week for Waste Reduction • Green Month • Student Sustainability Summit • COP Campaign • Green Celebration Awards  Objective – Continue to embed sustainability information into staff and student inductions.	Creation and continual update of calendar of events that includes key campaigns, engagement programmes, events, communication pieces.  Liaise with key groups to ensure sustainability is embedded in their communications – Student Affairs, People and Culture, Community Engagement and Accommodation.		Ongoing	Discussions are underway for 2024/25.  In 2023, European Week for Waste Reduction was promoted via three key events: Autumn Clean Up (50ppl), Panel Discussion: Circular Economy – Fantasy or Reality' (45ppl) and Positive Volunteering (30ppl).  Our annual Student Sustainability Summit was held on 30 January, providing students with the opportunity to raise their concerns around 4 key topics – food, finance, travel and education (62ppl).  Green Month of Community Action was held in May – it involved a litter pick (40ppl), bioblitz with a local community group (12ppl) and a range of planting sessions (53ppl).  Organisation for events in 2024/25 are underway.  2023/24:  Included in International Student Welcome Talk to 400 students.  Embedded in 'Community Living Handbook' and the Accommodation handbook.  Attendance at all New Staff Fairs
Sustainable Design and Construction	Objective – Embed net-zero carbon strategies across the University estate and begin to track progress.  Targets:	Recruit and appoint an Estates Manager Sustainable Construction to lead embedding of sustainable design and construction	Estates Manager (Sustainable Construction)	Completed	Progress for 2024/25 sessions is underway.  Estates Manager (Sustainable Construction) has been appointed and commenced in December 2022 (Nathan Campbell).

• Target Passive House	principles across University	Head of		
certification for all new	projects.	Sustainability		
buildings;			Completed.	The Net-Zero Design Guide was signed
<ul> <li>Target EnerPHit certification for</li> </ul>	Coordinate development of a	Head of Estates		off in early 2024. Significant
all refurbishment projects >	net-zero design guide,	Planning		collaboration has taken place within
£1m;	collaborate with various			the Estates Directorate, and beyond, in
Begin to benchmark all projects	Estates departments to			order to propose a workable document.
against carbon metrics for best	understand challenges, and			
practice.	implement the new standard.			
Release Net-Zero Design Guide				
for use.				Identification of 'pathway projects' has
			Ongoing	taken place and development is
Objective - Improve Sustainable	Review and update			imminent – this includes PV Panels on
Design and Construction of New	procurement documentation			the Main Site and Air Source Heating
Builds and Refurbishments.	to ensure project teams fulfil			within the Maths & Physics Building.
Targets:	requirements.			
Achieve BREEAM Excellent for	·			The first Passive House certified
New Builds >£1,000,000-	Ensure Whole Life Carbon			student accommodation block in NI
ongoing	assessment & energy			has been tendered by the University,
<ul> <li>Achieve BREEAM Very Good for</li> </ul>	modelling is undertaken for all			with building starting in 2024.
Refurbishment – >£1,000,000	future projects.			
11010151311110111 721,000,000	,			8 BREEAM Excellent
	Use applicable BREEAM			6 BREEAM Very Good
	criteria for new builds and			
Objective - Embed net-zero carbon	refurbishment projects from			Sustainability design and construction
principles and requirements across	early design stage and			standards have been reviewed as part
all our design and construction	integrate within design criteria,			of the development of the next stage of
specifications in line with net-zero	reporting progress at each			the University carbon reduction strategy
strategy requirements	RIBA stage.			– including exploration of other
strategy requirements	THE TOTAGE.			standards – Passivhaus / SKA etc.
	Review the Sustainable Design			
	Development Brief and			The first Sustainable Construction
	develop an alternative			Conference was hosted on Wednesday
	appropriate process.			28 February. <u>Further information on the</u>
				event can be found here. (220 ppl)
	Pavious and undete of all			
	Review and update of all			
	applicable specifications			

		integrating appropriate sustainable design standards.  Delivery of costed net -zero action plan - including development of sustainable design principles and standards.			
Waste Management	Objective - Increase percentage of waste recycled and reduce volumes of waste generated - ongoing. Target:  • Maintain figure of over 80% of waste diverted from landfill from July 2021 onwards.	Improve use of existing recycling facilities for staff and students:  • Extend waste streams which can be recycled. This will include extending the roll out of Food Waste, Ban the Bin.  • Review of waste labels  • Open Warpit to external charities  Focus on waste reduction initiatives and campaigns:  • Roll out of the Queen's reusable '2 Go Cup'  • Latte Levy  • Lab equipment  Develop waste/resource strategy/circular economy strategy. To aid the completion of waste audit/reviews across the Estate focus on high impact areas will take place (integrate with student projects).	Head of Sustainability  Assistant Estates Manager (Waste)  Project Support Officer (Sustainability)  Head of Campus Food and Drink	Ongoing	Current recycling and recovery rate is 93.79% (2022/23) for Municipal General Waste i.e. 93.79% diverted from landfill.  Furniture donations to several Charities/Schools/Clubs –Oxfam, Habitat for Humanity and use of WARP IT is ongoing. The opening of Warpit to external charities in September 2024 will enhance this opportunity.  Staff/ student working group established to review use of single-use plastics and identify opportunities to reduce single-use plastic across the University.  Continue to roll out LEAF to ensure waste is being minimised where possible from labs.  Queen's reusable '2 Go Cup' was rolled out in 2023, on offer within large-scale events and conferences, to minimise single use waste associated with coffee cups.  A 'Latte Levy' has been in place since late 2023, offering individuals 20p when they bring their reusable.

					Waste Management Contract tendered and awarded - focus on landfill diversion and contributing to circular economy.
					From January to March 2024, a student placement focused on possible circular economy projects that could be rolled out within the university.
					A review into waste labels will take place in 2024/25, involving staff and student engagement.
Travel and Transport	Objective – Increase uptake of Sustainable Travel across the University Targets:  • Travel to Work Survey took place in October 2022 with publication of 2023 – 2028 Travel Plan due to be published in 2024.  • Maintain Cycle Friendly Employer Accreditation Gold – on going – 2023/24	Appointment of consultants to support development of a Travel to Work Survey and travel strategy.	Estates Manager Environmental Assistant Estates Manager (Transport)	Ongoing	<ul> <li>Previous Travel Survey:</li> <li>2018 demonstrated a reduction in staff dependence on single occupancy car travel from 33.7% (2015) to 30.6% and a reduction from 16.4% (2015) to 13.4% in student travel.</li> <li>2020 Travel Survey: 5% reduction in staff travelling to the University by single-occupancy car journey by 2020/21.5% reduction in students travelling to the University by single-occupancy car journey by 2020/21</li> <li>Travel to Work Survey was completed in October 2022, with Travel Plan Strategy with plan launched in May 2024.</li> </ul>
	Objective - Increase cycling provision across campus via	Engage with key internal and			Continue to be accredited with Cycle Friendly Employer Accreditation.  Engagement:
	education, engagement and enhanced infrastructure. Targets:	external stakeholders to ensure:			Active travel hub on campus, in partnership with Big Loop Bikes,

- Engage with external providers to host 8 events every academic year.
- Provide additional cycling parking for a further 100 bikes across the campus by June 2023; 50 by 2024.
- A yearly 10% increase associated with: bikes leased to students via hub; second hand bikes sold, bikes serviced.
- Engage with Translink and external stakeholders including Belfast City Council, Ulster University and Belfast Metropolitan College, to make public transport а more attractive option for staff and students travelling to the University.

- 'Green travel' and its benefits are continually communicated to our community.
- Queen's continues to campaign and engage with Dofl/Translink for better travel and infrastructure options.

- was established and launched in September of 2021 – 30 bikes leased, 45 recycled bikes sold, 400 bikes serviced. 2022/23 - 30 bikes leased, 73 recycled bikes sold, 166 bikes serviced.
- Range of events have taken place during Bike Week (June 2024) – 1xDr Bike Session, Social Cycle, , Cycle Security Marking, E-Bike Experience, talk with Cycling UK, Cycle + and local academic. Further events included Big Loop Bike Hub presenting at multiple Welcome events, including Fresher's Fair.
- Cycle Parking: In 2020/21 several cycle parking spaces were put in place - 60 in MBC, 30 in Ashby, 34 in the main site. 2021/22 - 20 spaces have been incorporated into the main site; 60 spaces in One Elmwood; 40 created in School of Management.
- Range of public transport incentives and promotions by Translink – monthly attendance on site – ongoing.

Open Botanic project – working with School of Natural Built Environment and Public Engagement - proposal for a cycle lane on Botanic Ave. developed. Meeting with Minister to raise profile of the project. Now included within Bolder Vision for Belfast. 'Open Botanic Day'

	Objective – Increase availability of EV Charging  Install 3 additional EV Charging points across the campus by December 2023  4 additional EV Charging points by June 2024	Continue to review the estate to identify areas for EV potential.			took place in November 2022 and due to take place in November 2023. In December 2023, as part of COP28 Awareness Events, a 'Connecting Belfast: Transforming Travel' panel event was hosted in a local community centre. Over 50 staff, students and members of the local community took part in the discussion.  2023 EV Charging Points: Two EV charging points installed in School of Management; 1 EV charging point in MBC; 1 EV charging point in Ashby.
Biodiversity	Objective - Increase awareness of biodiversity amongst staff, students and the local community. Target:  • A minimum of 4 biodiversity events for staff and students to participate in every academic year.  Objective - Maintain Green Flag for the university main site. Renewal - February/Audit - June or November.  Objective - Enhance the biodiversity found within Queen's campus. Target:  • Two new biodiversity opportunities identified and implemented each academic year.  Objective - Enhance Pollinators and native species across campus.	Identify opportunities for enabling staff & students to participate in biodiversity enhancement projects – 4 new opportunities every academic year.  Renew Green Flag application in February (annual)  Liaise with the Gardening Team and Students' Union to establish key opportunities and involvement.	Head of Sustainability  Estates Manager Environmental  Head Gardener  Project Support Officer (Sustainability)  Assistant Sustainability Officer	Ongoing	A range of biodiversity hotspots have been created across the Estate as part of the wider Nurture and Grow programme - Lennoxvale Tree Nursery, Pharmacy Garden, Elms Village Allotment Garden, DKB Quad. Queen's university Belfast was a winner within the 2020 UK and Ireland Green Gown Awards.  The formation of our next biodiversity hotspot includes the creation of a wildlife meadow at the Ashby Hill. This was completed in May 2023.  A range of yearly biodiversity events and new initiatives have/will take place during the 2022/23 academic year:  Community clean-ups – November 2022 (30ppl) and March 2023 (50ppl)  Elms Allotment Workshops October 2022 and May 2023 (10ppl)

•	Maintain and uphold commitment to All Ireland Pollinator Plan - ongoing	Identify tree planting and pollinator opportunities throughout the campus.	<ul> <li>Lennoxvale Tree Nursery – sapling removal and planting (15 and 16 November 2022 – 60ppl)</li> </ul>
	Plant native trees, hedging and plants (minimum of 20 native trees each year, and 30 linear metres of wildlife hedging).		<ul> <li>Bulb planting in November (4760 bulbs planted) – 10ppl</li> <li>Tree planting in Malone – 146 saplings planted – 20ppl</li> <li>Three litter picks – 150ppl</li> <li>Green Flag and Green Heritage Award retained for the Lanyon Site for 2023/25 (Benchmark National Standard for public green spaces). Application</li> </ul>
			submitted for 2024/25 with our 6 <sup>th</sup> Green Flag Award achieved in July. Hedgehog surveying commenced in
			Summer 2023 and 2024.  No Mow areas - set aside as part of
			commitment to Pollinator Plan - Ashby Hill (Chlorine Gardens), DKB Quad, Riddel Hall, MBC, Elms Village, PEC.
			Partners in the Million Trees for Belfast Initiative:
			<ul> <li>2020/21 - 21 trees planted across the campus; &gt;80 Linear metres hedge and &gt;320 plants placed within Riddel Hall.</li> <li>2021/22 - 41 trees planted across campus; &gt;30 linear metres hedge planted; 50 plants.</li> <li>2022/23 - &gt;500 trees planted across campus (Malone Playing Fields); &gt;30 linear metres (Riddel Hall School of Management)</li> </ul>

	Objective – Creation of a biodiversity Plan for the Campus.				2023/24 – 146 trees planted across campus (Malone Playing Fields)  Discussions are ongoing with Biodiversity Action Plan due to be published in June 2025.
Water and discharges	Objective - Increase efficiency of water use via the use of borewells, rainwater harvesting technologies, monitoring and other water efficient technologies.  Objective - Fulfil legal requirements:  • Meet abstraction licence requirements for borewells at each location (as per licence).  • Meet water quality standards set at by drinking water inspectorate at each borewell location - ongoing  • Prevent pollution to local waterways - Compliance with Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010  • Comply with effluent consents as stipulated on licence requirements	Ensure necessary controls and monitoring are in place to ensure compliance.  Monthly monitoring - borewell usage at each location - ongoing  Monthly monitoring of water quality to comply with DWI requirements – ongoing as stipulated in licence	Estates Manager Environmental  Estates Manager Maintenance  Estates Minor Works	Ongoing	Borewells at several sites across campus – David Kerr Building, Elms Accommodation, Malone Playing Fields and Medical Biology Centre – completed.  Implementation of flow control devices, water metering and water efficient WCs and taps.  Pilot meter scheme with NI Water to minimise water leaks from source – due for completion December 2023.  Ongoing monitoring to comply with licencing requirements  Ashby/DKB bund replacement – completed.
Community Involvement	Objective - Increase engagement and involvement of local residents with sustainability programmes, initiatives and events within Queen's. Target:  • Complete 3 community events.	Identify opportunities to engage with the local community with the Grounds and Garden Team, Community Engagement and Handy Helpers (SU).	Estates Manager Environmental Head Gardener Project Support Officer (Sustainability)	Ongoing	<ul> <li>Continuing to work with San Souci Residential Association via the Lennoxvale Tree Nursery.</li> <li>Community clean-ups – November and March.</li> <li>Participants in the Belfast Million Trees program.</li> <li>In May 2024 QUB hosted 'Green Month of Community Action':</li> </ul>

	educe emissions associated with				mural on Botanic Avenue is currently being planned.
Procurement Procur	Establishment of a baseline for procurement related emissions by July 2023. Review and analysis of 'carbon hot spot' areas. Review of purchasing protocols and Supply Chain Code of Conduct. Development of a training package for staff involved in purchasing, to raise awareness, drive motivation and build knowledge.  Inclusion of Supply Chain Code of Conduct within all contract requirements - ongoing Provision of resources to support QUB Supply Chain in addressing emissions.  evelopment of a Sustainability upply Chain Management System. argets:	Appointment of consultants to support development of bespoke net-zero carbon targets for QUB to cover scope 1, 2 and 3, carbon off-setting, climate change adaptation and associated costed action plan.  Review and report on data available to the University to baseline scope 3 inventory – October 2022. This will include staff/student travel data.  Creation of a supply chain stakeholder map for scope 3 hotpots that will be included in Queen's Carbon Reduction Plan – November 2022.  Complete a review of and report on the most impactful actions currently being undertaken on Scope 3 by other organisations in the UK – November 2022.  Creation of a costed action plan including identifying supply chain hotspots and actions to support supply chain	Head of Sustainability  Estates Manager (Energy)  Senior Procurement Manager (Sustainable)  Head of Campus Food and Drink	Ongoing	Suppliers to the University are being directed to register with and utilise NETpositive (or equivalent), a free tool that will help suppliers to create a simple sustainability action plan for their business. Ongoing review of progress against action plans will be undertaken at contract management meetings.  A Sustainable Food Policy and Sustainable Print Policy have been established - includes key sustainability procurement actions – report to senior management.  Plastic Working Group has been established and a key theme which is being addressed within the working group is procurement.  Procurement Department has drawn together various strands of responsible procurement into an overarching Supply Chain Code of Conduct which is applicable to all suppliers and links directly to the United Nations Sustainable Development Goals which sets out a blueprint to achieve a better and more sustainable future for all – published online and supplied to all significant suppliers.  Work by consultants (ARUP) and the university has been completed, with the

Commission a review of the	to reduce emissions - March		establishment of a baseline and action
University's use of the	2023.		plan for our Scope 3 data published in
_			June 2023.
suppliers to find out what	Appoint consultant to assist		Tandar raviow was undertaken in early
systems they are currently using	with the creation of a		Tender review was undertaken in early 2024 for the Supply Chian Management
and their capability.	Management System –		System.
<ul> <li>Strategy, Action Plan and Implementation</li> </ul>	Summer 2024		dystem.
Onboarding process - campaign			
of events to educate and			
communicate			
-			
basis			
	University's use of the NetPositive system, survey suppliers to find out what systems they are currently using and their capability.  Strategy, Action Plan and Implementation  Onboarding process - campaign of events to educate and communicate  Top suppliers per category (Labs, ICT etc.) in a room to educate on our vision for decarbonisation and Net Zero Strategy.  Targeted training/supplier education  Carbon footprint measured and reported on an annual basis to assess the impact on our Scope 3 emissions Ongoing monitoring and measuring on an annual	University's use of the NetPositive system, survey suppliers to find out what systems they are currently using and their capability.  Strategy, Action Plan and Implementation  Onboarding process - campaign of events to educate and communicate  Top suppliers per category (Labs, ICT etc.) in a room to educate on our vision for decarbonisation and Net Zero Strategy.  Targeted training/supplier education  Carbon footprint measured and reported on an annual basis to assess the impact on our Scope 3 emissions Ongoing monitoring and measuring on an annual	University's use of the NetPositive system, survey suppliers to find out what systems they are currently using and their capability.  Strategy, Action Plan and Implementation  Onboarding process - campaign of events to educate and communicate  Top suppliers per category (Labs, ICT etc.) in a room to educate on our vision for decarbonisation and Net Zero Strategy.  Targeted training/supplier education  Carbon footprint measured and reported on an annual basis to assess the impact on our Scope 3 emissions Ongoing monitoring and measuring on an annual