Delivering sustainability in our estates, procurement and wider community

UNIVERSITY OF GREENWICH

The university launched its Sustainability Strategic Action Plan in November 2024, setting out strategic sustainability KPIs. These are underpinned by a broad range of SMART KPIs set out in this document and other sustainability related policies and action plans.

The university has a clear legal and moral responsibility to ensure it reduces and eliminates impacts that impact on human health and the environment. This is set out in the university's Sustainability Policy and this is managed and reviewed through the delivery of our Environmental Management System. We are certified to ISO14001 with the scope covering our Estates and Facilities Directorate. We have been certified since 2012 and through this we knave developed our Aspects and Impacts register and developed processes and systems that have continually improved on our impacts.

We report progress in our Annual Sustainability Report, which is based in large part on HESA Estates Management Data the university submits. We also provide data and information on wider areas including our application of the UN Sustainable Development Goals, education, research and other activities we undertake.

Estates based actions: Estates Strategy:

- The Corporate strategy explicitly identifies the need to deliver "Connected and Sustainable Campuses" and this refers to the targets to meet net zero targets, zero waste and other objectives that enable the university to achieve sustainable practices in the development and refurbishment of the estate. In March 2022 the university launched its Estates Strategy (supported by the Estates Development Plan). This sets out the strategic objectives to deliver to the needs of a changing and expanding estate. This includes the design and construction of new buildings and the refurbishment of existing ones. Underpinning this is the Responsible and Sustainable Guiding Themes. Within this the Development Principles are:
    - Resilient to climate change,
    - Net zero carbon,
    - Sustainable design and use,
    - Environmentally net-positive and,
    - Supports Sustainable Behaviours.
- *"Our campuses will proactively meet our climate change responsibilities and the Green Agenda. Future development will adopt circular-economy principles to minimise embodied and operational carbon and infrastructure upgrades will help us achieve net-zero across our campuses. Our campuses will become environmentally net positive, raising awareness and supporting our influence globally and with our local communities."*
- Our core SMART targets are found in the net zero plan. The decarbonisation of the university is by far mostly focused on the decarbonisation of heating systems. This will complete through the implementation of the university Estates Development Framework underpinned by the Estates Strategy. The Net Zero Carbon Plan sets out the investments to decarbonise each campus by 2033 (note that the plan completion deadline has been extended).

Biodiversity and natural spaces

The university is fortunate to have campuses that either have habitats with rich biodiversity or that are located close to those that do. We actively apply the requirements and objectives set out in our Biodiversity Action Plan (BAP). Note this remains current until the new BAP is launched towards the end of 2025.

The BAP sets out the habitats, contexts and plans that we have in place for improving the value of our natural spaces, it also sets out how we engage with our internal and external stakeholders. We have utilised the academic expertise within the university working with our architects to develop initiatives that create Biodiversity Net Gain. For example, the Stockwell Street Building hosting a diverse collection of 14 landscape roofs including spaces for research and teaching as well as food growing spaces and wildlife.

We encourage students and staff to explore our natural spaces for wellbeing, wonder and for learning teaching and research purposes. We undertake habitat surveys to review how we are progressing with the improvement of our habitat improvement.

The Biodiversity Action Plan sets out the detail as to the richness and potential to our estates and the clear plans we are delivering against to improve the biodiversity value and stakeholder engagement of our estates. See Biodiversity Action Plan

Emissions & discharges

The university has a clear legal and moral responsibility to ensure it reduces and eliminates emissions and discharges that impact on human health and the environment. This is set out in the university's Sustainability Policy and this is managed and reviewed through the delivery of our Environmental Management System. We are certified to ISO14001 with the scope covering our Estates and Facilities Directorate.

Our main areas where we emit to the air are through:

- Combustion of fossil fuels (Scope 1 carbon emissions) the burning gas for heating, catering and labs functions, fleet and business travel (Scope 3) through use of fossil fuelled equipment (for example mowers). *This is reviewed via audits against net zero plan.*
- Emission of gases through experiments in laboratories and workshops. *Assessed against implementation of training, via lab audits.*
- Potential emission of F-gases from refrigeration and air conditioners. *Assessed against F-gas contractor reports.*
- Fire suppression systems (for example in server rooms). Assessed against fire management systems.
- Refurbishment or demolition of buildings generation potential emissions of dusts and including asbestos. *Assessed via construction management and refurbishment systems. Asbestos analysis is undertaken through third party delivery with management and supervision undertaken by UoG Asbestos Duty Holder with reports presented to the H&S committee.*
- Emissions of chemicals through the degassing from paints, adhesives, furniture and carpets and from activities such as photocopying or central printing services. *Assessed through contractor use of paints and other materials.*
- Smoking and vaping. *Assessed against adherence to UoG policies.*
- Ventilated emissions from catering. Ass*essed against performance of equipment used and good practice catering practices.*

Emissions & discharges

We manage, reduce and avoid releases to water focusing on the following areas:

- Oil Storage and spillage. *Assessed by contractor records and reports to the Accident Reporting System (AMS) and site audits*
- Water sources maintenance. Assessed by contractor records and reports to the AMS and site audits
- Run off from parking areas or grounds. *Assessed by reports to the AMS and site audits*
- Unpermitted discharges by contractors including for events, or during an emergency. Assessed by reports to the AMS
- Leakage of materials stored on-site (chemicals, oil, lubricants, diesel, fertilizer, antifreeze, cleaning materials). *Assessed by reports to the AMS*
- Potential discharges to sewer (foul drainage - effluent) or surface water drainage during normal operation. *Reviewed against Discharge Consents*
- Controlled Chemical disposal in laboratories. *Reviewed as part of sustainable labs initiatives.*

We recognise that some emissions and discharges may come from contractors. This is covered in the above system that requires any contractor on site to meet our requirements. We also recognise the need to reduce impacts through the resource supply chain. This means working with suppliers that reduce emissions in production and transportation. It also means looking to maximise the utility of buildings, materials and other resources within the university so reduce the need for new buildings, furniture and equipment.

Emissions & discharges

Our key indicator metrics that support our ability to meet success criteria are:

- Meeting net zero decarbonisation targets for estate and fleet. *These are set out in the net zero plan.*
- Zero annual emissions of F-gasses. *Assessed through the review of F-gas reports via our engineering contractors*
- Zero annual use of VOC containing paints. *Assessed though audit of contractors*
- Zero incidents annually relating to unmanaged asbestos release/exposure. *Assessed via reporting to via the AMS and reports to the H&S committee*
- Zero oil leaks annually. *Assessed via reporting to AMS*
- Zero uncontrolled emissions annually to drain. *Assessed via reporting to AMS*

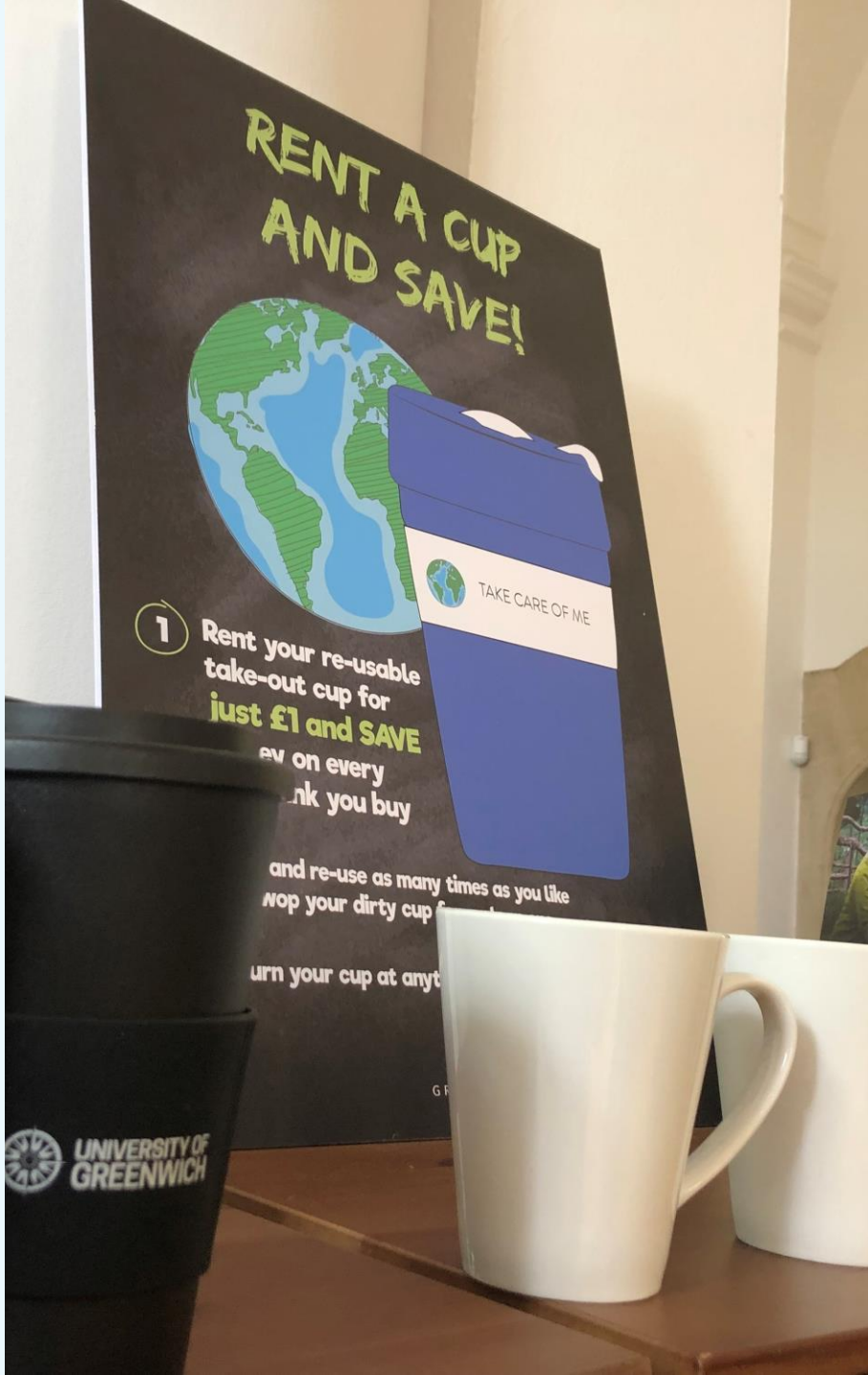
All indicators are also reviewed through the internal and external environmental management system audits.

Waste management

The university recognises the importance to reduce the amount of waste it generates and to move towards a circular economy model. Out Waste Action Plan sets out how we are delivering against this. We are signed up to the Ellen MacArthur Foundation's Direction of Travel statement of intent setting out our commitments to move our teaching, research and operations along a more circular model. We are actively pursuing circularity in areas such as furniture reuse, end of term (halls) reuse, green waste composting, on site food production, using waste, refined cooking oil in our CHP plant etc. We actively encourage staff to procure only when necessary and to buy materials that can be easily reused or recycled. We have, for example, set out guidance to ensure that marketing materials are avoided and if provided then are not single use, and are sustainable or have a long lasting, useful purpose. We have goals to increase the use of reusables in our catering outlets and increasing use of the water fountains and free drinking water areas on our campuses. We have comprehensive and consistent recycling systems across our university. We are also improving the systems in place for our halls residents to recycle. Our students deliver clothing ‘Swaps’ which have been successful in highlighting fast fashion, textile waste and reusability.

We consider data to be essential to help us respond to issues of waste generation and recycling and receive monthly waste reports from our FM contractors. These are reviewed monthly with recommendations for action or investigation agreed to ensure waste generation is reduced and wherever possible recycling is increased.

Our recycling target is 70% by 2020 and as of 2023/24 we achieved 41%. Our new Waste Action Plan, plus additional staff resourcing means we have better waste management that will improve this recycling rate in the remaining years.



Waste management

The Corporate strategy sets out clearly the need to achieve zero waste. We have made ongoing progress particularly in reductions of waste against baseline year (2009/10) where we have reduced waste by 41% by 2023/24 when we have increased staff and student FTE by almost 50%. Initiatives reducing waste have included digitisation of work to avoid paper printing, implementation of furniture and end of term reuse schemes and initiatives encouraging use or reusable drinks containers.

Recycling had improved to 62% in 2019/20 (close to the 70% by 2030 target, though in 2023/24 this was 41%, with plans in place to meet the target.

We have a Waste Action Plan that sets out how we manage waste to avoid its generation, though avoiding new, reusing and recycling where possible. All general waste is sent to energy from waste plants.

We are signatories to the Ellen MacArthur Foundations (EMF) Direction of Travel which provides principles to meet to enable us to align more closely with the Circular Economy model. We are also a EMF 'Profiled University.'

We have piloted zero disposable campuses including at the Greenwich campus using Cauli as a programme to change consumer behaviours.

Water

Water is essential to life on earth and essential to the operation of our university. Recognising that our estates are located within water stressed areas of the country the university aims to minimise the water it uses wherever it is used. We also ensure that we minimise the releases of materials to sewer and water courses and protect our 'blue' environments through habitat improvement projects. We are also aware of the need to understand and reduce the water 'footprint' of the materials we buy in, this includes food and other resources. To help meet this we aim to wherever possible maximise the utility of our resource including buildings, materials and equipment through shared use and reuse schemes for example.

Water consumption:

The university aims to ensure it minimises water use through the investment in systems that consume less water. All urinals across the university are waterless, with all cisterns being low flow and we have invested in water flow restrictors in our halls of residence. Shower heads and taps are reviewed and replaced to continually improve water efficiency. We invest in behaviour change systems such as Student Switch Off and focus training on other higher water users such as lab users, catering and cleaning staff. Grounds related water use is limited to watering in grass and wildflower seeds, wildflower planters and the goal mouths of our grass football pitches.

Water use is monitored via our El Component AMR utility data collection system, plus manual monthly meter reads by facilities staff plus the review of AMR utility water data. This is helping ensure we are identifying leaks quickly in addition to helping focus attention where unexpectedly high water use is occurring.

Water

The university has a SMART target to reduce consumption by 1% per year. In 2023/24 we achieved a 73% increase of water consumption against baseline (2009/10) (compared to an FTE difference of a 35% increase between years). This increase is in part due to meter reporting errors between reporting years.

Reducing releases to water

The university has in place management and training procedures that seek to reduce and eliminate the release of harmful substances to sewers and watercourses. This includes labs, workshops, catering outlets and close management of risks where spills could occur around the campus (such as oil/fuel leaks, car wash run off etc).

Blue environmental management and protection

We have an ongoing habitat improvement scheme. This includes the restoration and improvement of our ‘blue’ environment areas: rivers, streams, ponds and their border areas. Part of the university’s Ecosystems Services Policy identifies the need to reduce and eliminate herbicides that can if not applied and managed safely can impact on water sources. We are piloting a range of practices to achieve this, including resting natural herbicides (acetic acid) and herbicide bans. Seaweed based fertilizer is used and its application managed o avoid impacts of eutrophication on water sources.

KPI: elimination of use of herbicides an artificial fertilisers.

Travel and Transport

The university is committed to reduce the carbon related to its travel needs. It has undertaken a programme of investment in its fleet including the investment in hybrid coaches between the Greenwich and Medway campuses and two electric busses between the Avery Hill and Greenwich campuses. Furthermore the university has a green travel plan that will help meet net zero plans and reduce the need to travel between campuses or reduce the demand for car related travel encouraging active travel or electric car use. A significant part of our travel footprint comes from business travel flights. Our net zero plan includes the need to reduce business travel including flight emissions by 50% by 2030. It is expected the Green Travel plan could deliver this sooner than this.

The SMART KPI's can be found in the Green Travel Plan. Progress will be reported on the collection of data for the HESA EMR submission.

See Green Travel Plan

Sustainable procurement

The impacts from our procurement decisions are significant. These include the carbon impact of the goods we buy, which is the largest component of our total carbon emissions. There are also other impacts we are legally or morally required to consider. This includes the need to ensure we comply with the Modern Slavery Act, but also to ensure that where possible suppliers are meeting responsibilities relating to avoiding environmental and social impacts within the whole supply chain. The university is proud to be accredited as a Fairtrade University (achieving Level 1 in the new accreditation system) and one procurement related KPI is to maintain this standard to 2026 and review this every two years subsequently. We also ensure that paper used comes from recycled or FSC certified stock and that wood products used in construction and refurbishment are also from FSC sources.

The university has a set of sustainable procurement systems that ensures we have responsible suppliers within our procurement system. This includes a sustainable procurement policy and strategy.

Stakeholder engagement

The university has a Sustainability Engagement Strategy, that sets out who we engage with and how we do this.

We recognise that we have important stakeholder groups that are essential to helping us deliver sustainability improvement. This includes students, staff (including some in high impact areas), contractors, as well as external stakeholders such as local authorities, businesses and the communities we reside within.

Within the Strategy we have set out our KPIs to illustrate our progress.