



The University of Edinburgh Waste Strategy 2018/19 – 2022/23

Implementation Plan

This Implementation Plan details how the objective and targets identified in the Waste Strategy will be met.

Circular Economy

Objective	Develop and promote further practical initiatives relating to circular economy, and support research and teaching on circular economy thinking through collaborative projects with industry.
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Actions		
CE1	Continue to support reuse initiatives as part of a vision for a circular economy	<p>Work with the Department for SRS to support them to meet their targets for Warp It to increase active users and money saved.</p> <p>Work with Department for SRS to commission a materials flow and life cycle analysis of our waste arisings and impacts</p> <p>Work with the Department for SRS to support their Strategy target to pioneer a circular economy model across all of the University's operations in partnership with suppliers and industry with a vision of zero waste by 2030.</p>
CE2	Expand coffee ground recycling project	<p>Work with ACE to further roll out the coffee ground recycling project to all ACE cafes, explore opportunities to extend this to EUSA managed outlets, and work with the Landscape Division regarding opportunities to use the resulting product (an all-natural, 100% recycled plant food).</p> <p>Work with the ecoprise to assist with further development of their business model i.e. focusing on research for how the bio-oils extracted from the coffee grounds can be used, such as ingredients for cosmetics and food flavourings.</p>
CE3	Effective communication	A robust method of measuring and reporting waste will be developed as this is essential for underpinning the enforcement of responsibility for

Actions		
		waste as well as future reporting requirements. This will clearly be displayed on a redesigned Waste website.
CE4	Contribute to SRS Resource Efficiency and Circular Economy Programme	<p>Work with the Department for SRS to develop practical ways towards increasing reuse and decreasing contamination, and to grow links with research, innovation and outreach.</p> <p>Assist the Department for SRS with their Living Lab projects, partnerships with the Business School and others, and work towards exploring opportunities to increase capacity, funding and income in the area.</p>
CE5	Partnership working	Work with partners across the University and wider including the Department for SRS, Edinburgh Innovations, Edinburgh Centre for Carbon Innovation, Zero Waste Scotland, and Schools, to innovate and explore, test, promote and commercialise, promising waste and resource management approaches.

Waste Reduction, Reuse, and Recycling and Composting

	Academic Estate¹	ACE Managed Student Accommodation at Pollock Halls²	ACE Managed Student Catering at Pollock Halls^{Error!} Bookmark not defined.
Waste reduction	10% reduction in waste arising per capita (FTE staff and students) from a baseline of 73 kg in 2016/17 to 66 kg.	10% reduction in waste arising per student from a baseline of 66 kg in 2016/17 to 59 kg.	10% reduction in waste arising per student from a baseline of 71 kg in 2016/17 to 63 kg.
Reuse	Increase reuse rate to 10% against a 2016/17 baseline of 5%.	Reuse at least 90% of furniture and equipment resulting from accommodation refurbishments.	<i>Target not appropriate as no scope for reuse.</i>

¹ Based on total academic waste arisings in 2016/17, and FTE staff and students numbers (at the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used).
² Based on total term-time waste arisings in 2016/17 (September to May inclusive), and 1,979 beds at Pollock Halls (at the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used).

Recycling and composting³	Increase recycling/composting rate to 80% against a 2016/17 baseline of 52%.	Increase recycling rate to 80% against a 2016/17 baseline of 41%.	Increase recycling/composting rate to 80% against a 2016/17 baseline of 66%.
Composting/AD	Reduce food waste by 40% to 36 tonnes in 2022/23 (against a baseline of 60 tonnes in 2016/17).	<i>Target not appropriate as food waste is not collected separately within student accommodation.</i>	Reduce food waste by 40% to 34 tonnes in 2022/23 (against a baseline of 57 tonnes in 2016/17).
Landfill diversion	Maintain percentage diverted from landfill at 99%.		

Actions		
WRRRC1	Increase furniture reuse	Further develop relationships with the Furniture Office and external partners to explore additional reuse opportunities both internally and externally (to include ACE furniture).
WRRRC2	Increase reuse of bulky materials	<p>Further develop relationships with external partners in order to increase reuse of bulky materials such as metal waste, wood waste, or furniture (where waste cannot be reused internally).</p> <p>Work with ECA and Maintenance Services to highlight the services the Waste Office can offer, and emphasise the importance of reuse (internally or externally) in order to reuse the large quantities of bulky waste that could potentially be reused but due to time constraints, and lack of storage within the estate, is often sent for further processing externally.</p> <p>Work with Maintenance Services to ascertain if a service can be made available where broken items can be mended.</p> <p>Scope for reuse hubs across the estate will be determined, in particular at the ECA.</p>
WRRRC3	Increase reuse of IT equipment	Work with the Department for SRS and IS to further develop the PC Reuse Project in order to reuse PCs

³ Includes anaerobic digestion.

Actions		
		and other IT equipment internally, and seek to make PC reuse 'Business as Usual'.
WRRRC4	Increase reuse of high value lab or clinical equipment, or selling of assets (as opposed to sending for recycling or reuse via a licensed waste contractor)	<p>Encourage reuse of lab or clinical equipment internally via Warp It, or recycled or reused externally via our WEEE contractor.</p> <p>Launch the formal process for donating or selling redundant electrical equipment externally in conjunction with the Procurement Office and the Department for SRS.</p> <p>Explore any other opportunities available for lab or clinical equipment e.g. using a company who collect, store and sell unused or surplus laboratory equipment, or working with our WEEE contractor to explore further avenues.</p>
WRRRC5	Effective engagement and communication	Work with the Department for SRS to develop the Waste website in order that consistent guidance is being given to all users to increase reuse and recycling rates, and to decrease contamination of the recycle stream.
WRRRC6	Increase and expand reuse internally and externally to the University	<p>Assist the Department for SRS to expand the reuse portal (Warp It) to 1,000 users by 2019 and to reach their target of a cumulative £500k saving.</p> <p>Seek to expand external reuse through links with social enterprises and other organisations.</p>
WRRRC7	Reduce contamination in waste streams to improve quality of recycling	Work with the Department for SRS to develop social media campaigns, and to support their network of Waste Coordinators in order to reduce contamination levels within the recycle and food waste streams.
WRRRC8	Decrease consumption of hazardous materials	Assist the Department for SRS to meet their target to identify substitution opportunities, with three substitutions being successfully implemented by 2020.
WRRRC9	Consistent signage across the estate	Work with the Department for SRS to ensure that consistent signage is used on all internal bins across the estate.

Actions		
WRRRC10	Increase reuse of WEEE	Work with our WEEE contractor to increase reuse of WEEE, and assist them in developing partnerships for further reuse either internally or externally.
WRRRC11	Diversion of animal bedding waste from landfill	Aim to compost all animal bedding waste (where feasible); for new buildings, liaison with Estates Development will ensure that there is adequate storage allocated on site for collection of such waste.
WRRRC12	Sustainability included in all staff inductions	Work with the Department for SRS and Human Resources to meet their aim to have sustainability included in all staff inductions by 2020.
WRRRC13	Develop initiatives to address the use of single-use cups	<p>Work with the Department for SRS, ACE and EUSA to develop initiatives to address the use of single-use cups across the estate. This may include introduction of a tax/surcharge when using a single-use cup and the possibility of providing staff and students with subsidised/free reusable cups.</p> <p>Work with our contractors and industry to investigate further options for recycling of single-use cups.</p> <p>Use of reusable cups will continue to be advertised and the discount available at ACE/EUSA outlets.</p>
WRRRC14	Audit general and recycling streams	Work with our contractor to conduct a large-scale audit of our general and recycle streams (for the academic estate, ACE managed student accommodation at Pollock Halls, and ACE managed student catering at Pollock Halls). In particular, assess contamination levels, and the amount of single-use cups and plastics being disposed of in both streams. Results from the audit will be used to inform initiatives going forward, in particular with relation to single-use cups and plastics.
WRRRC15	Reduce plastic waste	<p>Work with the Department for SRS, ACE, EUSA, Procurement and suppliers in order to reduce the amount of plastic being disposed across the estate, and to investigate alternatives.</p> <p>Work with the Department for SRS to support their Strategy target to pioneer a circular economy model across all of the University's operations in partnership with suppliers, and industry elimination of non-essential single use plastics by 2030.</p>

Actions		
		<p>Implement any UK/Scottish Government scheme to support the elimination of single use plastics by 2030 e.g. deposit return scheme.</p> <p>Work with the Department for SRS to support the objectives in the Drinking Water Policy: to install drinking water points in order to reduce the number of plastic bottles disposed on site.</p>
WRRRC16	Reduce paper waste	Work with the Department for SRS, Printing Services and IS to reduce the amount of waste paper across the estate. Increased communications and engagement will be implemented alongside further use of cloud printing.
WRRRC17	Effectively manage Festival waste in line with the waste hierarchy	<p>Work with the Festivals Office, University tenants, the Department for SRS and the Council to ensure that Festival waste is managed as sustainably as possible, and further develop guidelines for management of Festival waste for tenants.</p> <p>Commission further work to inform how reductions in waste will be delivered from hosting of festivals recognising the range of challenges this brings.</p>
WRRRC18	Reduce laboratory waste	Work with the Department for SRS and laboratory users to reduce the amount of chemical waste and other wastes (including equipment at the end of its useful life, packaging, and consumables).
WRRRC19	Reduce food waste sent to anaerobic digestion	Work with the Department for SRS, ACE and EUSA to investigate routes for redistributing food waste from the University's catering outlets.

Sustainable Procurement

Target	Support improvement and innovation in supply chain waste to contribute to Scottish and global circular economy ambitions.
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Actions		
SP1	Embed sustainability into the procurement process	Aim to procure goods and services in ways that maximise efficiency and effectiveness while minimising social, environmental and other risks to ensure that environmental and social issues have been taken into account within the procurement process. Sustainable procurement will allow the University (where feasible) to: cut down on overused products; purchase reusable or refillable products; lease equipment that has waste reduction features e.g. photocopiers; use durable items i.e. non one-use; to buy equipment that can easily be mended or has interchangeable parts; and to specify/buy items with recycled materials.
SP2	Formally set targets for waste contractors within contracts regarding minimum reuse/recycling targets	Specify within contracts that contractors should develop further reuse/recycling opportunities and explore opportunities for further partnership working e.g. local schools, social enterprises, etc, and circular economy initiatives. Formal reuse and recycling targets will be required to be achieved as a minimum.
SP3	Formally set targets for waste contractors within contracts regarding diversion from landfill	Work with the Procurement Office to ensure that contractors have a contractual duty to divert as much waste as possible from landfill i.e. in accordance with the waste hierarchy.
SP4	Embed circular economy in the procurement process	Work with the Procurement Office and the Department for SRS to develop a greater understanding of procurement for a circular economy and collaborations with industry on product design and development, and sustainable procurement guidelines will be further developed with an emphasis on sustainability criteria in all tenders.
SP5	Aim to improve supply chain management	In cooperation with the Procurement Office and the Department for SRS, opportunities will be developed to improve supply chain management through working with suppliers to encourage them through Research and Development to reduce packaging or instead use materials that can be reused or recycled at end-of-life.
SP6	Engage with suppliers regarding packaging take-back	Work with the Procurement Office to implement supplier take-back to reduce the overall tonnage of

Actions		
	at point of delivery or on request	waste per annum, and incentivise suppliers to reduce or reuse packaging.
SP7	Embed community benefit clauses within the procurement process	Work with the Procurement Office to introduce opportunities for community benefit clauses (where applicable) in projects (at present this is mandatory for projects with a value greater than £4 million).
SP8	Innovative procurement	Use innovative procurement routes to improve efficiency and performance of waste management.

Sustainable Estate Development

Target	Promote resource efficiency via the effective management and reduction of construction waste with targets specified, monitored and reported in site specific management plans.
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Actions		
SED1	Provision of appropriate waste storage facilities within all buildings	<p>Work with colleagues in Estates Development to ensure that there is provision for both internal and external waste infrastructure.</p> <p>Centralised waste compounds to be developed on our Campuses to ensure efficient waste management minimal waste vehicle traffic.</p>
SED2	Place minimum targets for reuse of construction waste by contractors	Work with Estates Development and Procurement to ensure that all contractors have a robust Site Waste Management Plan during construction to determine which waste can be segregated and reused on site, and to include data collection.
SED3	Aim for waste reducing methods of construction	Work with Estates Development and Procurement to ensure that all contractors utilise (where possible) modern methods of construction, to have a robust approach to buildability in order to reduce waste which may include prefabricated elements and modular design elements.
SED4	Reclamation and recycling pre-demolition audit	Work with Estates Development and Procurement to ensure that all contractors conduct pre-demolition waste audits to identify major waste streams and

Actions		
		<p>how to handle them. Reuse of waste at source will be encouraged.</p> <p>For all projects undertaken ensure that separated storage and collection of waste streams is adequate for the volume of waste generated.</p>
SED5	Design for deconstruction	Work with Estates Development and Procurement to ensure that all contractors Design for Deconstruction (DfD) i.e. considering and managing end-of-life building materials to minimise consumption of raw materials.
SED6	Lean Design	Work with Estates Development and Procurement to ensure that all contractors design out unnecessary features where appropriate e.g. exposed soffits versus suspended ceilings, exposed walls versus plasterboard, reduce road/paving surface area (replace with planting/greenery,) and also lean structures such as pre-tensioned hollowcore slabs, or tensioned steel cable net roof vs. structural steel beams.