## Waste & Resource Use Strategy - Delivery Plan 2021-2024

Implementation: 1-Very hard to implement; 2-Moderately difficult to implement; 3-Easy to implement

Impact: 1-Low (isolated or low-profile); 2-Moderate (covers certain key areas); 3-High (multi-site or estate-wide and/or high-profile

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Delivery Category	/ Delivery Action	Waste Stream	Cost Reducti on	-	1 2	3	45	6	1 2	3 4	4 5	Ease of Implement ation	Impact	Facilitation Score (Ease x Impact)	Responsibility	work to be undertaken	Timescale	Implementa tion Cost	Saving	Env. Benefit	Overall Priority	
On-site Solutions	Review wheelie bin quantities and emptying frequency to optimize recycling streams and reduce bin rental costs	Various			Y	Ŷ	Y			Y		3	3	9	Sustainability	Analyse monthly data from Select and request appropriate changes	By Nov 2022	Nil	£946 p.a. reduction from 246 to 219 bins	Reduced bin lifts	High	Completed
On-site Solutions	Install centralised recycling stations inside all buildings and remove under-desk individual bins	Various			ΥΥ	Ŷ	Y			Y	Y	3	3	9	Sustainability / Cleaning	Most areas do not have desk bins emptied by cleaners	By Sep 2022	Previously funded	Cleaners' time	Increased amount of waste sent for recycling	High	Completed
Contractual	Ensure that Pay-by-Weight is in place for all applicable waste streams	Various	Y						Y		Y	2	3	6	Sustainability / Procurement	To be included in 2021/22 waste contract re-tender		Included in waste contract	Included in waste contract	Encourages stream segregation	High	Completed
Contractual	Undertake a tender process for all recycling and waste services, adopting Strategy and based around innovation, to ensure competitive costs and increased focus on the Waste Hierarchy	All			ΥΥ	Y	ΥΥ	Y	ΥΥ	Ϋ́	ΥY	2	3	6	Sustainability / Procurement	Waste contract re- tender	By Dec 2021	Nil	Included in waste contract	Increased focus of moving waste up Hierarchy	High	Completed
Contractual	Add TVSP and the farms into the main waste contract in order to take advantage of contract prices	Various	Y						ΥΥ	Y		3	2	6	Sustainability / Procurement	Include in waste contract re-tender	By Dec 2021	Nil	Up to £3.2k p.a. for GW & £1.1k p.a for DMR	None	High	Completed
Health & Safety / Duty of Care	Ensure copies of hazardous waste consignment notes and waste transfer notes (WTN) are sent to Sustainability Services to be collated	All		Y								3	2	6	Sustainability	Annual WTN for most collections. WTN & consignment notes for ad-hoc collections to be sent & stored by Sustainability	On-going	Nil	Nil	Duty of Care	High	Completed
Innovation	Roll-out recycling collections for pipette tip boxes from labs (made from polypropylene)	Plastic			Y		Y			Y		3	2	6	Sustainability / Technical Services	New wheelie bins for pipette tip box collections to be rolled out		Nil	Nil	Recycling of plastic rather than sent to incineration	High	Completed
Innovation	Reduce food waste by changing cooking processes and better menu control; plus use of leftover food to be developed	Food			Y Y	•	ΥΥ			Y		2	3	6	Catering	Using the Menus of Change framework to roll- out innovation	On-going	Funded via Catering	£130 per tonne of food waste	Less food waste	High	Completed
On-site Solutions	Remove compactors for general waste and cardboard at Whiteknights catering yard (change to wheelie bins) to reduce cost and allow re-charge split between Catering and RUSU to be based on actual data	Various				Y				Y		3	2	6	Sustainability / Procurement	Discuss options with Procurement, Catering & RUSU	By Dec 2021	Nil	Up to £10k p.a.	Reduce on-site electricity usage	e High	Completed
On-site Solutions	Introduce usage of clear sacks for all waste and recycling bins, rather than black sacks for general waste, allowing cleaning staff to judge which stream to put sack into	General waste			Y	Y	Y			Y		2	3	6	Sustainability / Cleaning	Agreed with Cleaning. Training of staff to be undertaken	By Dec 2022	Nil	£60 per tonne sent to recycling	Increased amount of waste sent for recycling	High	Completed
On-site Solutions	Consider introducing a 2-stream waste/recycling collection solution inside buildings: non-food dry waste (to be sent to recycling plant) and separate food waste (to be sent to AD)	Various			Y Y	Ŷ	Y			Y	Y	2	3	6	Sustainability / Cleaning	Discuss with Cleaning	By Jul 2024	ТВС	ТВС	Increased amount of waste sent for recycling	High	To be carried forward
On-site Solutions	Review use of compactor for general waste at Greenlands (with potential to change to wheelie bins) to reduce cost and alleviate smells	General waste	Y							Y		3	2	6	Sustainability / Procurement / Greenlands	Discuss options with Procurement & Greenlands as part of new waste contract	By Jun 2022	Nil	Up to £6k p.a.	Reduce on-site electricity usage	e High	Completed

On-site Solutions	Review use of cardboard baler at Greenlands (with potential to change to wheelie bins) to determine most optimal future solution for cardboard recycling	Paper / Y Cardboard		Y	3	2	6	Sustainability / Procurement / Greenlands	Discuss options with Procurement & Greenlands as part of new waste contract	By Jun 2022	Nil	Up to £2k p.a.	Reduce on-site electricity usage	High	Completed
Waste Stream Specific	Catering to purchase new dishwasher for glasses at Park Eat so that more drinks can be served in glass rather than plastic cups	Plastic	Y Y Y Y	Y Y	2	3	6	Catering	Purchase of new dishwasher and glasses at Park Eat	By Sep 2022	Funded via Catering	Nil	Increased re- use of items	High	Completed
Waste Stream Specific	Create a more formalised mechanism to increase the amount of IT equipment that is redistributed and re-used within the University, rather than sending equipment to be recycled after its first use	Equipment / WEEE	Y Y Y Y Y	Y Y Y	2	3	6	DTS	Discussions between DTS, IMPS and Sustainability	By Sep 2023	Funded via DTS	ТВС	Increased re- use of IT equipment within UoR	High	In progress - due by July 2024
Circular Engagement	Investigate suppliers that focus on giving a service, rather than selling items/goods, to improve circular lifecycles of goods	Various	Y Y Y Y	Y Y Y	2	3	6	Procurement	Discuss in Responsible Procurement Group	By Oct 2023	Nil	ТВС	Less disposal of items	Medium	To be carried forward
Contractual	Check that waste contractor is giving rebate for each collection of metal waste	Metal	Y Y	Y Y	3	2	6	Sustainability / Procurement	Check monthly invoices and raise in supplier review meetings	By Dec 2022	Included in waste contract	Included in waste contract	None	Medium	Completed
On-site Solutions	Ensure skips are full before collection/emptying so that journeys and costs are reduced	Various	Y	Y Y	2	3	6	Sustainability	Work with users to ensure skips are full as possible	By Dec 2023	Nil	Up to £1k p.a.	Fewer skip collections, so reduced vehicle movements	Medium	Completed
On-site Solutions	Management of surplus food from cafés to be reviewed to consider how to reduce waste disposal and save costs	Food	Y Y	Y	2	3	6	Catering	Catering to consider options for unwanted food to reduce disposal	By Aug 2022	Nil	£130 per tonne of food waste	Reduction in food waste	Medium	Completed
On-site Solutions	Reduce waste from refurbishments and offices moves, with an emphasis on better planning for large scale re-use, repair and re-manufacture.	Various	Y Y Y Y	Y Y	2	3	6	Sustainability / Projects	Discussions between Sustainability and Projects	By Jul 2023	Included in project cost		Increased re- use of items	Medium	Completed
Waste Stream Specific	Review locations and containers for collecting glass bottles from across campuses	Glass	Y Y Y	Y	3	2	6	Sustainability	Consider 240L bins versus bottle banks; and most relevant locations	By Jul 2023	Nil	Nil	More glass removed from general waste	Medium	Completed
Waste Stream Specific	Remove more cardboard from General Waste & DMR stream and collect seperately in bins for paper/card	Paper / Cardboard	Y Y	Y	2	3	6	Sustainability	Better labelling of internal & external bins; improved information to staff	By Jul 2023	Included in waste contract	£60 per tonne sent to recycling	Increased amount of card sent for recycling		Completed
Waste Stream Specific	Removal of hard-backed books/theses from general waste, by collecting and sending to specialist contractor to de-spine and recycle	Paper / Cardboard	Y Y Y	Y	3	2	6	Sustainability	Discuss with Select, Library, Archives	By Dec 2021	Nil	Nil (£130 per tonne on-cost compared to GW)	Increased amount of paper sent for recycling	Medium	Completed
Waste Stream Specific	Introduce monthly wooden pallet collection round from specific campus locations by main waste contractor (to reduce number of pallets being put in skips with other wood)	Wood	Y Y Y	Y Y	3	2	6	Sustainability	Included in new Waste Contract - to be actioned by Select	By Jul 2022	Nil	Nil	Increased re- use of pallets. Better data	Medium	Completed
Circular Engagement	Improve uptake of UniGreenScheme for disposal of unwanted, working equipment from labs, catering etc.	Equipment / WEEE	Y Y Y Y	Y	2	2	4	Sustainability		By May 2022	Nil	£150 per tonne of WEEE not sent for disposal	Increased re- use of equipment	Medium	Completed
Communication	Create a communications plan to engage and communicate with staff/students about their part in waste processes and new innovations	Various	Y Y Y Y	Y Y Y	2	2	4	Sustainability	Integrate with Sustainability annual comms plan	By Sep 2023	Nil	Difficult to quantify	Reduce waste produced and increase re-use		Completed

Communication	Identify methods of engaging building users in gamification and competition to raise engagement levels	Various	Ŷ	ΥΥ	Y		ΥΥ	Y	2	2	4	Sustainability	Revamp & publicise DoingUoRBit platform for staff & students	By Dec 2022	Previously funded	Difficult to quantify	Increased focus of moving waste up Hierarchy	Medium	Completed
Communication	Review internal bin signage wth a view to improving it, particularly the details of where food/drink should be put	Various		Y	Y			Y	2	2	4	Sustainability	Undertake interna bin audit and decide if changes needed	l By Jul 2024	Nil	£60 per tonne sent to recycling	Improved recycling	Medium	Completed
Communication	Consider promoting or developing a "Living App" to assist in increasing recycling awareness and activity	Various		Y	Y			Y	2	2	4	Sustainability	Investigate existing apps	By Sep 2024	ТВС	Difficult to quantify	Improved recycling	Medium	To be carried forward
Health & Safety / Duty of Care	Roll-out new wheelie bins to improve access for Cleaning staff and reduce impact from vermin, including improved labelling & branding	Various Y							2	2	4	Sustainability / Cleaning	Discuss specific locations with Cleaning Services	By Jul 2023	Up to £12k p.a. extra for bin rentals	Nil	Duty of Care	Medium	In progress
Health & Safety / Duty of Care	Establish a permanent home for 5 RORO skips, particularly if the current location is going to be compromised by the Art School building	Various Y							2	2	4	Sustainability / H&SS / Campus Services	Initial investigation of possible locations	n By Jul 2023	Nil (unless fencing required)	Nil	Duty of Care	Medium	Completed
Innovation	Investigate alternative disposal routes (e.g. incineration) for the small quantity of waste that is currently disposed of at a licenced hazardous waste landfill (approx. 1 tonne per year).	Hazardous waste		Y	ΥΥ	Y		Y	2	2	4	Sustainability	Discuss options with waste contractor	By Jul 2024	Up to £5k for 1 tonne p.a.	Nil	Less material sent to landfill	Medium	Completed
Innovation	Roll-out collections for heat-proof lab glass (borosilicate), which cannot be recycled with standard bottle glass	Glass		Y	Y			Y	2	2	4	Sustainability / Technical Services	First trial collection from TOB1 lab clearance to take place	n By Dec 2022	Nil	Nil (same disposal cost as GW)	Recycling of glass rather than sent to incineration	Medium	Completed
Innovation	Investigate re-usable greengrocer crates that are returned to suppliers, rather than using cardboard packaging; and better segregation of recycling streams in catering venues.	Various	Y	Y	ΥΥ			Y	2	2	4	Catering / Procurement	Catering to discuss with suppliers	On-going	Funded via Catering	TBC	Increased re- use	Medium	To be carried forward
On-site Solutions	Update older external waste/recycling bins at Whiteknights and improve signage on all external bins	Various		Ŷ	Y			Y	2	2	4	Sustainability	Undertake external bin audit and upgrade project	By Jul 2022	£23k (funded in 2021/22)	Nil	Improved recycling	Medium	Completed
On-site Solutions	Update older external waste/recycling bins at London Road and UPP Halls and improve signage on all external bins	Various		Y	Y			Y	2	2	4	Sustainability	Undertake external bin audit and upgrade project	By Jul 2024	£15k	Nil	Improved recycling	Medium	In progress - due by July 2024
On-site Solutions	Increase paper cup tax and improve access to re-usable alternatives in cafés and restaurants	Cups	Ŷ	Y	Y		Y	Y	2	2	4	Catering	Decision to be made and communicated	By Sep 2022	Funded via Catering	Nil	Increased re- use of items	Medium	Completed
Reporting & Monitoring	Ensure all collections of metal have weight data	Metal		Y	Y		Y	Y	2	2	4	Sustainability	Weight data for all skips and ad-hoc collections to be recorded by Select	-	Included in waste contract	Nil	Better data analysis	Medium	Completed
Reporting & Monitoring	Obtain weight data for all clinical waste collections and information about final treatment/disposal	Clinical			ΥΥ	Y		Y	2	2	4	Sustainability	Information to be provided by Select	, 0	Included in waste contract	Nil	Better data about waste to landfill	Medium	Completed
Waste Stream Specific	Investigate replacing Vegware in cafés with re-usable containers and cutlery	Food	Ŷ	ΥΥ	Y		Y	Y	2	2	4	Catering	Investigate possible eat-in situations	By Jul 2024	ТВС	Nil	Increased re- use instead of disposal	Medium	Completed
Waste Stream Specific	Identify potential alternative solutions to problem single-use plastics in order to remove/reduce amount used	Plastic	Y	ΥY	Y		ΥY		2	2	4	Sustainability / Procurement	Identify problem plastics and investigate options	By Jul 2024	TBC	Nil	Less plastic in circulation	Medium	Completed
Waste Stream Specific	Reduce the amount of non-clinical waste entering the clinical waste stream, including more use of "Tiger bags" where appropriate; and ensure clinical waste is collected in correct packaging for waste properties		Y		Y	Y		ΥΥ	2	2	4	Sustainability / Technical Services	Undertake audit and discuss with Technical Heads/Managers	By Dec 2023		Up to £4k p.a. (2t put into Tiger bags ilo clinical)	hazardous for disposal		Completed
Waste Stream Specific	Storage for Warp-IT scheme to be moved from Marsden Shed due to demolition for ECMWF building	Furniture		Y	Y		Y		2	2	4	Sustainability / Projects	New storage location to be agreed and move made	By Jun 2023	Funded by Projects	Nil	None	Medium	Completed

Innovation	Investigate whether our waste contractor can send residual waste from the segregation of bulky general waste to EfW incineration, rather than to landfill	General waste		Y	Y	Y Y Y		Y		1	3	3	Sustainability	Discuss options with waste contractor	By Jul 2024	£5k p.a. (for 10 tonnes)	Nil	Less material sent to landfill	Medium	Completed
Innovation	Investigate 'Green Chemistry' - the idea of switching from hazardous to less/non-hazardous chemicals, thereby reducing environmental risks and disposal costs, and moving up the Waste Hierarchy	Chemicals		ΥΥ	Y	ΥΥΥ		Y	Y	1	3	3	Technical Services / Schools	Part of LEAF scheme being rolled out by Technical Services	By Jul 2024	LEAF scheme funded	ТВС	Less hazardous waste	Medium	In progress
Waste Stream Specific	Investigate expanding food waste collections to serve offices, kitchenettes and social areas in buildings	Food		Y	Y	,	,	Y		1	3	3	Sustainability / Cleaning	Analyse options and costs before making decisions	By Aug 2024	TBC (new bins & extra time for cleaning staff)	Nil	Less food waste sent to EfW	Medium	In progress
Waste Stream Specific	Investigate expanding food waste collections to serve smaller cafés, food market and events	Food		Y	Y	,	,	Y		1	3	3	Sustainability / Catering	Analyse options and costs before making decisions	By Aug 2024	£200 per extra bin to be bought	Nil	Less food waste sent to EfW	Medium	In progress
Waste Stream Specific	Investigate reverse vending and deposit return schemes	Glass		Y Y	ΥΥ	Υ	Ŷ	Y	Y	1	3	3	Sustainability / Catering / Procurement	Investigate Government strategy and plans plus supplier actions	By Jul 2024	TBC	ТВС	More glass removed from general waste	Medium	To be carried forward
Innovation	Consider if labs can use clinical waste one-trip tubs made from recycled plastic (e.g. Wiva Infinity range)	Plastic		Y Y	ΥY	,			Y	2	2	4	Sustainability / Technical Services	Bins to be assessed by Technical Services to consider impact		£500 p.a. (on- cost for 250 bins used)	Nil	Use of recycled material rather than virgin plastic		Completed
Contractual	Engage with the Letsrecycle.com website to understand the value of some of the recycling and waste streams	Various	Y				,	Y		3	1	3	Sustainability	Monthly check to be initiated	By Dec 2022	Nil	Nil	None	Low	Completed
Health & Safety / Duty of Care	Consider creating fenced waste compounds away from buildings for storage of wheelie bins, in order to increase security, reduce fire risk, and improve aesthetics.	Various	Y							1	3	3	Sustainability / H&SS / Campus Services	Initial investigation of possible locations	n By Jul 2024	TBC	Nil	Duty of Care	Low	To be carried forward
Innovation	Collect expanded polystyrene (EPS) on campus to be sent for recycling	Plastic		Y	Y	,	,	Y		3	1	3	Sustainability / Porters	Select to supply a skip for EPS collection, and Porters to add items	By May 2023	Nil	Nil	Increased recycling. Less bulk items in general waste bins	Low	Completed
On-site Solutions	Investigate the feasibility of operating a waste sorting facility on site in order to pre-sort items, to improve the amount of material sent for recycling rather than sent off-site as general waste.	Various		Y	ΥY	r	,	Y		1	3	3	Sustainability / H&SS / Campus Services	Initial investigation of feasibility	n By Jul 2024	TBC	Nil	Increased amount sent for recycling	Low	To be carried forward
Reporting & Monitoring	Incorporate Warp-It weight and cost savings data into the annual reporting process	Furniture		Y	ΥΥ	ÝÝ	Y		Y	3	1	3	Sustainability	Data to be downloaded from Warp-it and saved into weight spreadsheet	By Sep 2021	Nil	Nil	Better data analysis	Low	Completed
Reporting & Monitoring	Roll-out of Pay-by-Weight for glass and food collections in order to improve data collection	Various			Y	Y Y	,	Y		3	1	3	Sustainability	Included in waste contract re-tender	-	Included in waste contract	Included in waste contract	None	Low	Completed
Innovation	Consider carpet recycling as part of refurbishment projects	Carpet		Y	Y	,	Y Y	Y		2	1	2	Maintenance / Projects	Consider for refurbishments	By Jul 2024	ТВС	Nil	Increased recycling	Low	To be carried forward
Innovation	Investigate recycling of small items made from rigid plastic e.g. pens, stationery, coffee pods	Plastic		Y	Y	,	,	Y		1	2	2	Sustainability	Discuss options with waste contractor	By Jul 2024	TBC	Nil	Less material sent to EfW	Low	To be carried forward
Innovation	Investigate recycling of soft plastics e.g. food bags, crisp packets	Plastic		Y	Y	,	,	Y		1	2	2	Sustainability	Discuss options with waste contractor	By Jul 2023	ТВС	Nil	Less material sent to EfW	Low	Completed
Innovation	Investigate segregation of coffee grounds for composting or upcycling	Food		Y	Y			Y		1	2	2	Sustainability / Catering	Discuss options with waste contractor	By Jul 2024	ТВС	Nil	Less material sent to EfW	Low	To be carried forward
Reporting & Monitoring	Introduce a set of KPIs to assess waste management processes	All			ΥY	Y	YYY	Y		2	1	2	Sustainability / Procurement	Included in waste contract re-tender		Included in waste contract	Included in waste contract	None	Low	Completed
Reporting & Monitoring	Introduce a monthly data recording and reporting process using figures from service providers, covering all streams	All		Y	ΥY	Υ			Y	2	1	2	Sustainability	Spreadsheet analysis in place	By Aug 2022	Nil	Nil	Better data analysis	Low	Completed

Reporting & Monitoring	Determine annual weight of composting undertaken by Grounds Maintenance	Organic	Y	Y	Y	2	1	2	Sustainability / Grounds	Undertake audit & By Aug 202 desktop exercise	3 Nil	Nil	Better data analysis	Low	In progress
Waste Stream Specific	Consider Vegware collections from cafés/restaurants (to be sent to commercial composting facility)	Food	Y		Ŷ	1	2	2	Catering	Investigate By Jul 2024 possibility for eat- in situations	£100 per tonne on-cos	Nil t	Sent for composting rather than EfW	Low	In progress
Waste Stream Specific	Investigate the collection of standard paper cups in DMR, rather than needing separate collections	Cups	Y	Y	Y	1	2	2	Sustainability	Discuss with Select By Dec 202	3 Nil	TBC (stop using separate collection bins)	More cups collected	Low	Completed
Waste Stream Specific	Investigate textile collections for workwear	Textiles	ΥΥ	Ŷ	ΥΥ	2	1	2	Sustainability / Procurement	Investigate By Jul 2024 workwear in Maintenance, Catering, Labs etc.	ТВС	TBC	Reduction in general waste	Low	To be carried forward
Innovation	Investigate introducing plastic-free paper cups, which could be composted or included with cardboard for recycling	Cups		Y	Y	1	1	1	Sustainability / Catering	Initial investigation By Jul 2024 of feasibility	TBC	Nil	Increased amount sent for recycling	Low	Completed