



Estates Committee

Raeburn Room, Old College

Wednesday 12 September 2018, 9.30am-12.30pm

AGENDA

- 1 Minute (closed) A**
To approve the minute of the previous meeting held on 16 May 2018.
- 2 Matters Arising**
To raise any matters arising.

SUBSTANTIVE ITEMS

- 3 Estates Capital Plan 2017-18 to 2027-28 (closed) B**
To note a paper from the Director of Estates
- 3.1 Finance Director's Update - Interim Ten Year Forecast (September 2018) (closed) B1**
To note a paper from the Director of Finance
- 4 Student Residential Accommodation Strategy 2018-2028 (closed) C**
To endorse a paper from the Director of Corporate Services
- 5 Engineering Module 1 – Full Business Case(closed) D**
To approve a paper from the College Registrar, College of Science and Engineering
- 6 King's Buildings Infrastructure West (closed) E**
To approve a paper from the Director of Estates
- 7 New Business School Project (closed) F**
To approve a paper from the Head of College, College of Arts, Humanities and Social Sciences
- 8 Space Strategy Group Report G**
To consider a paper from the Director of Estates
- 9 Fire Risk Management (closed) H**
To note a paper from the Director of Estates Operations
- 10 New College Fire Asset Protection & Compliance Works (closed) I**
To approve a paper from the Director of Estates
- 11 David Hume Tower Refurbishment (closed) J**
To approve a paper from the Director of Estates

ROUTINE ITEMS

- 12 Capital Project Update (closed)** **K**
To note a paper from the Director of Estate Development
- 13 Estates Committee Sub-Group and Estates Tender Review Panel Approvals** **L**
To note a paper from the Director of Estates
- 14 Development & Alumni Capital Project Update (closed)** **M**
To note a paper from the Vice-Principal for Philanthropy and Advancement
- 15 Strategic Acquisitions and Disposals (closed)** **N**
To note a paper from the Director of Estates
- 16 Planned Works over £500k to Residential Property Estate (closed)** **O**
To approve a paper from the Director of Accommodation, Catering and Events
- 16.1 Churchill House Refurbishment (closed)** **O1**
To approve a paper from the Director of Accommodation, Catering and Events

ITEMS FOR FORMAL APPROVAL/NOTING (Please note these items are not normally discussed.)

- 17 Edinburgh Bio-Quarter Strategy – Update from detailed space modelling (closed)** **P**
To note a paper from the College Registrar, College of Medicine and Veterinary Medicine
- 18 Waste Strategy 2018/19 – 2022/23** **Q**
To note a paper from the Director of Estates Operations
- 19 Estates Department – Sub-Delegation of the University’s Delegated Authority Schedule** **R**
To note a paper from the Head of Estates Business Services
- 20 Professional Services Summary** **S**
To approve a paper from the Director of Corporate Services
- 21 Development & Alumni – Naming of a Lecture Theatre in the Edinburgh Medical School (closed)** **T**
To approve a paper from the College Registrar, College of Medicine and Veterinary Medicine
- 21 Date of next meeting: Wednesday 5 December 2018 - 9:30am – 12:30pm to be held in the Raeburn Room, Old College.**



ESTATES COMMITTEE

12 September 2018

Space Strategy Group Report

Description of paper

1. This paper reports on the main matters discussed at the meeting of the Space Strategy Group (SSG) held on 22 August 2018. Specifically it highlights the challenge in providing sufficient large lecture teaching space in the Central Area.

Action requested/Recommendations

2. Estates Committee is asked to:

- note the main matters which had been discussed at the SSG meeting on 22 August 2018; and
- consider the Space Strategy Group's recommendation that, on the basis of current teaching practices, an innovative additional large flexible teaching space (capacity circa 500) is created at the earliest opportunity to support Central area teaching.

Key points

Large Teaching Space Provision – Central Area

3. In March 2018 Estates Committee had considered a paper from SSG regarding the requirement for an additional large lecture theatre in the central area. Estates Committee referred the matter back to SSG for further discussion and clarification.

4. In response to this, a study to determine the need for an additional Central Area large teaching space in both the short and long term has been undertaken by the Timetabling Unit. Scheduling of large lectures for 2018/19 was successfully concluded with subsequent modelling undertaken to examine the sustainability of the 2018/19 timetable for future academic years. The modelling exercise showed that the current provision would not be sustainable.

5. The group considered the modelling information and agreed that it should be recommended that a new large teaching space should be provided at the earliest opportunity. A summary of the main points from the paper and key points raised at the meeting are provided below.

6. The University continues to grow its student population and the impact of this on teaching requirements is fundamental to student experience. Over the past few years the impact of student growth has led to severe challenges in the scheduling of large teaching spaces in the Central Area notably the 2017/18 academic year. Based on current expected growth projections (provided by Governance and Strategic Planning) across all Colleges, pressure on large teaching space will continue to increase in the upcoming years. This will require Schools to demonstrate increased flexibility by teaching at alternative times/days to their originally requested time, to undertake repeat teaching or to provide live streaming to an overflow area.

7. There are eight large teaching spaces in the central area with a capacity of over 250. These are shown in table 1.

Large teaching space	Capacity
Gordon Aikman Lecture (GALT)	473
Lecture Theatre A, David Hume Tower (DHT)	350
Lecture Theatre 4, Appleton Tower	300
Lecture Theatre 5, Appleton Tower	303
50 George Square, G.03	275
425 Anatomy lecture Theatre	260
Lecture Theatre B, David Hume Tower (DHT)	250
Lecture Theatre C, David Hume Tower (DHT)	250

Table 1 – Capacity of large teaching spaces

8. A dedicated large teaching space scheduling exercise was undertaken by the Timetabling Unit for the 2018/19 academic year to ensure all large teaching space demands could be met. The exercise included spaces with a capacity of 350 and over (GALT and Lecture Theatre A, DHT). Whilst all large teaching spaces play a part in a modelling exercise, Lecture Theatre A, DHT was specifically included as a number of courses have now outgrown the venue which makes GALT the only viable alternative.

9. For the 2018/19 academic year, 27 courses specified a requirement for space of over 350 capacity on the central area which was an increase of 6 from 2017/18. Table 2 below shows the frequency, occupancy and utilisation of the GALT for the 2018/19 academic year following the allocation of all 350+ activities. Analysis is based on 40 hour teaching week, Monday-Friday 9.00-18.00, excluding Wednesday afternoon

	Frequency	Occupancy	Utilisation
Semester One	92.95%	89.69%	83.37%
Semester Two	74.32%	92.72%	68.91%

Table 2: Gordon Aikman utilisation

- **Frequency (Freq):** The percentage of hours, within the designated timeframe, that a room is booked
- **Occupancy (Occ):** The percentage of seats occupied, in relation to the room's capacity, during each booked hour
- **Utilisation (Util):** A calculation of Frequency and Occupancy ($\text{Freq} \times \text{Occ} / 100$) to determine overall utilisation
- **Red, Amber, Green (RAG):** is an Space Enhancement Management Group agreed threshold for levels of utilisation, these are:

	High: 70–100% for Freq/Occ, 50 – 100% for Util
	Medium: 50-69.99% for Freq/Occ, 25.49.99% for Util
	Low: 0-49.99% for Freq/Occ, 0-24.99% for Util

10. As table 2 above shows the utilisation levels for GALT are extremely high. Appendix 1 provides a full summary of the exercise along with predicted growth and sustainability modelling.

Future Years - Modelling timetable sustainability

11. A modelling assessment was also carried out for academic years up to 2021/22 to assess the impact of continued growth on the current large teaching space provision in the Central area.

12. The following table includes 2 models:

- Model 1 (**assumes** seat for all enrolled students) – this indicates a requirement for an additional large teaching space **by 2019/20**
- Model 2 (**assumes** 10% non-attendance rate) – this indicates a requirement for an additional large teaching space **by 2021/22**

	2019/20	2020/21	2021/22
Model 1 – seat available for all enrolled students	Minimum of 28 hours of repeat teaching Additional 30 hours of repeat teaching OR remodelled day/times		
Comment	Unsustainable		
	2019/20	2020/21	2021/22
Model 2 – 10% non-attendance assumed	Minimum of 6 hours of repeat teaching Additional 3 hours of repeat teaching OR remodelled day/times	Roll-forward of 19/20 sustainable	Minimum of 28 hours of repeat teaching Additional 30 hours of repeat teaching OR remodelled day/times
Comment	Sustainable	Sustainable	Unsustainable

Table 3: Modelling outcomes

13. During discussion the group were advised that model 2 (assumed 10% non-attendance) was already a model utilised by schools in many instances. It was raised that this approach could be damaging for the university reputation if students did not have a seat available, particularly during the early part of the semester where attendance would likely be at its highest. Use of live streaming to another venue was also not a preferred approach due to the potential impact on the student experience.

14. It was highlighted that GALT and Lecture Theatre A, DHT both are in relatively tired condition required upgrading. Currently it was not possible to address these issues as there was no space provision within the central area for any decant space during a refurbishment and the extent of the work to both could not be accommodated over the summer.

15. It was noted that whilst there would be provision for large teaching spaces in the Nucleus at King's Buildings and the New Medical School these would not alleviate the

long-term additional requirement that had been identified in the central area. It was also noted that the large space that will be created at the Edinburgh Futures Institute (EFI) had not been included in the modelling exercise as this would be primarily event space rather than teaching space to support the activities of EFI.

16. The group agreed to recommend to Estates Committee that an additional large teaching space (capacity circa 500) is created at the earliest opportunity to support Central area teaching. They also added that any space should be as flexible and innovative as possible therefore flat floored with bleacher seating could be a possibility.

Staging Examinations in Sports Facilities

17. SSG discussed the follow up analysis in relation to staging examinations in sports facilities following a report that had been submitted to SSG in February 2018. It was agreed further discussion in relation to this issue was required.

Space Strategy Group Terms of Reference

18. The Group noted that Senior Vice-Principal Charlie Jeffery would assume the role of Convener going forward as Assistant Vice Principal Sarah Cunningham-Burley would undertake research activity for the coming academic year.

Student Survey Analysis – Report and Action Plan

19. The results of the student survey on teaching space which had been conducted in March 2018 were presented which demonstrated that students were by and large satisfied with their experience of teaching spaces. The initial findings report and analysis are available on the Estates Committee wiki for the interest of members.

20. It was agreed that it was important to raise the profile of the survey amongst the wider university and that the survey results should be highlighted to Estates Committee and the University Executive.

Teaching Spaces Oversight Group update from 03/05/18

21. The following two points to note:

- 18/19 general teaching room allocation update.
Outcomes of the 18/19 room allocation process confirmed there would be sufficient teaching space available for room allocation across the core teaching campuses in 18/19.
- Law Old College decant contingency.
Following confirmation of the delay to this project, the Timetabling Unit, Estates, Learning Spaces Technology and the College have successfully managed contingency space to ensure teaching continuity through semester 1.

Teaching Accommodation Programme for 2018/19 and 2019/20

22. An update was provided of progress with the rooms currently under refurbishment through the Teaching Accommodation Programme for the 2018/19 academic year and ongoing work with the Nureva span pilot at King's Buildings and Central area. The shortlist of rooms under consideration for the programme is 2019/20 was also provided.

23. The full proposed programme for 2019/20 would be presented to November Space Strategy Group meeting with a funding request presented to Estates Committee after this. Timetabling and Estates Development are assessing teaching accommodation

requirements for both 5 years and 10 years in line with the Capital Plan. This analysis will also be presented to the November Space Strategy Group meeting.

Resource implications

24. Time in developing plans and cost to refurbish a University building.

25. There is currently no provision in the capital plan for a new large lecture theatre in the Central Area.

Risk Management

26. The main risk is future disruption to University business continuity due to insufficient or inappropriate space which will impact on the student and staff experience.

Equality & Diversity

27. All Equality and Diversity implications in relation to the content of the report will be addressed within the specific projects and programmes

Next steps/implications

28. If the recommendations are approved the risk elements described in the paper will be escalated to the University Executive and the Senate Learning and Teaching Committee.

Consultation

29. Space Strategy Group and Teaching Space Oversight Group members.

Further information

30. Authors

Professor Sarah Cunningham-Burley
Assistant Principal and Convener of
Space Strategy Group

Presenter

Gary Jebb
Director of Estates

Hannah King
Policy & Governance Manager, Estates
Department

Angela Lewthwaite
Administrator & Committee Officer

Mr Scott Rosie
Head of Timetabling Services

23 August 2018

Freedom of Information

31. This is an open paper

2018/19 large lecture summary

A dedicated large lecture scheduling exercise was undertaken by the Timetabling Unit to ensure all large lecture demands could be met, and any compromise required by Schools negotiated at any earlier point in the summer

- 27 courses specified a requirement for space of over 350 capacity on the Central campus, an increase of 6 from 2017/18
- A resultant 37% increase in the total hours to be accommodated within Gordon Aikman Lecture Theatre (GALT) across both semesters

Activities which were unable to schedule at their originally requested time were given alternative clash-free days and times modelled by the Timetabling Unit. Modelling was undertaken on a “best-fit” basis, and offered no priority to any School. All activities with a requirement for GALT or Lecture Theatre A, DHT were included in the exercise.

Table 1 summarises final large lecture allocations as agreed by Schools

	Scheduling outcome 2018/19	Increase from 2017/18
Day/time remodelled	18	+18
Repeat taught/repeat taught + streaming venue	8	+2
Original day/time	50	n/a

Table 1: Scheduling outcomes

The following table shows the Schools who accepted compromise solutions, and the percentage of their activities with a requirement over 303 which were affected. In total 9 individual Schools were contacted, with those not represented in the table below reducing estimated planned sizes to fit within smaller capacity venues.

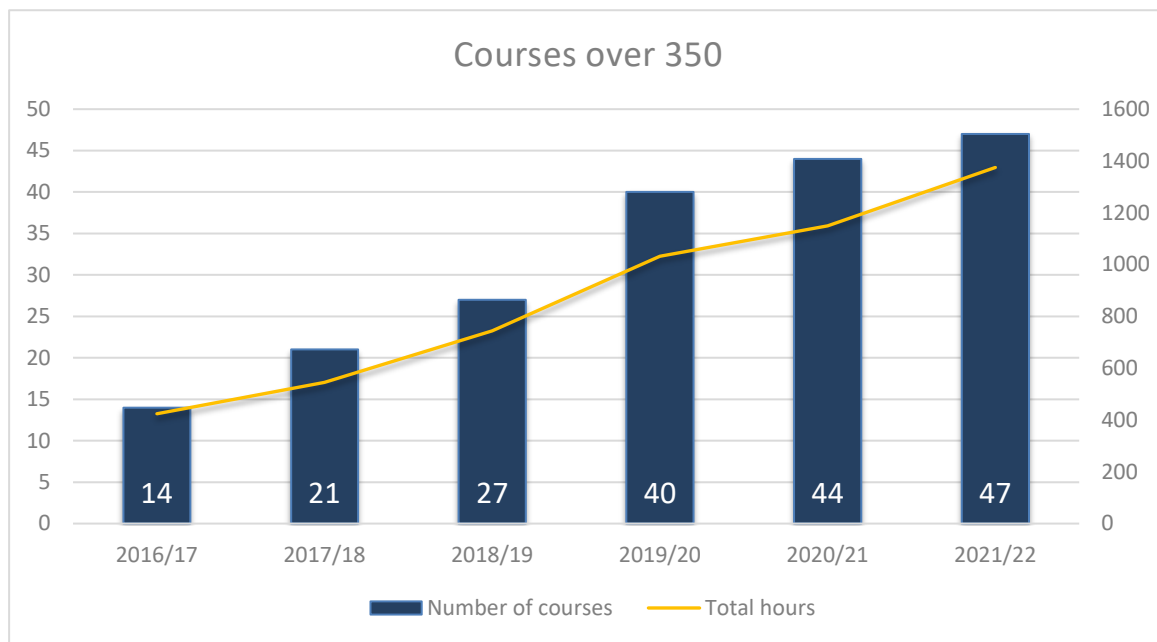
School	% activities affected	Total activities in exercise
School of Informatics	33%	13
School of Mathematics	52%	23
School of Law	25%	16
School of Engineering	67%	3
School of Social and Political Science	20%	20

Table 2: School impact

Predicted Growth

With continued growth expected across Colleges, pressure on large lecture theatre space will continue to increase in the up-coming years, requiring Schools to demonstrate increased flexibility.

Graph 3 shows the projected increase in courses requiring space of over 350 capacity in the Central area from 2016/17 to 2021/22, and the corresponding increase in teaching hours to be accommodated



Graph 3: Courses enrolments over 350

2016/17-17/18 real student enrolments (end of year)

2018/19 estimated student enrolments

2019/20-21/22 projected student enrolments based on College-level growth figures

Sustainability Modelling

The following assumptions have been made in modelling the sustainability of the 2018/19 timetable:

1. A roll forward of 2018/19 large lecture timetable, including re-modelled days/times agreed by Schools.
2. The yearly application of College level growth to 2018/19 activity planned sizes
3. The need to accommodate large scale Mathematics teaching within 350+ facility following growth beyond repeat teaching solution in 2018/19.
4. Repeat teaching as an acceptable short-term solution, in particular a commitment towards ensuring triple teaching is avoided.
5. Sufficient contingency within smaller lecture theatres to absorb increase in repeat teaching offerings.

Model 1: College-level growth

In Model 1, all enrolled students on an activity should have a seat within their allocated lecture theatre.

The table below summarises the yearly shift in space requirement as College level growth is applied year on year – by activity count. Activities within these spaces are typically 1 hour in duration

No of eligible activities	2018/19	2019/20	2020/21	2021/22
+473	0	17	37	42
GALT (351-473)	72	94	85	102
DHT (304-350)	40	93	82	87

Table 4: Impact of growth on space requirement

2019/20: Impact

- 7 courses are projected to exceed the maximum capacity of GALT (473) by 2019/20, and would therefore be assumed candidates for repeat teaching in smaller teaching facility – an additional **7 hours weekly in semester one, and 10 hours in semester two**
- The accommodation of Mathematics large lectures within GALT would result in compromise for 9 additional activities across both semesters – at minimum an **additional 2 hours of repeat teaching required** in semester one, with remodelling options available for the remaining 7 affected activities (both semesters) OR further repeat teaching
- An additional 14 courses are projected to exceed the maximum capacity of DHT (350) by 2019/20. 10 of the 25 associated activities could be scheduled within remaining released space in GALT
- At minimum, a further **9 hours of repeat teaching** would be necessary in semester one. The remaining **5 activities** in semester two could be accommodated through further timetable modelling, or repeat teaching
- 36 activities would become eligible for space within DHT in 2019/20 – 50% of which could be accommodated within released space in DHT. The remaining 18 would need to be repeat taught

Model 2: Assumed 10% non-attendance

In Model 2, a 10% non-attendance rate is assumed within projected planned sizes, allowing a level of growth beyond room capacity.

- The accommodation of Mathematics large scale lecture teaching within GALT results in the requirement for an additional **6 hours (weekly) of repeat teaching in semester one, and 3 hours in semester two** *clarify isn't Maths that will repeat teaching*
- With 10% non-attendance assumed, the remaining timetable in GALT and DHT could be sustained within considered theatres for an **additional 2 years**
- With 10% non-attendance assumed, activities within lower capacity bands (>300) could be accommodated for an **additional 2 years** before requiring accommodation within DHT

Model Summary

	2019/20	2020/21	2021/22
Model 1 – seat available for all enrolled students	Minimum of 28 hours of repeat teaching Additional 30 hours of repeat teaching OR remodelled day/times		
Comment	Unsustainable		
Model 2 – 10% non-attendance assumed	Minimum of 6 hours of repeat teaching Additional 3 hours of repeat teaching OR remodelled day/times	Roll-forward of 19/20 sustainable	Minimum of 28 hours of repeat teaching Additional 30 hours of repeat teaching OR remodelled day/times
Comment	Sustainable	Sustainable	Unsustainable

Table 5: Modelling outcome



12 September 2018

Estates Committee Sub-Group and Estates Tender Review Panel Approvals

Description of paper

1. This paper provides a consolidated list of decisions taken by Estates Committee Sub-Group (ECSG) since the last Estates Committee meeting on 16 May 2018. The paper also presents a list of contracts awards (greater than £250,000) over the period 1 May 2018 to 31 August 2018 that have been approved via the Estates Tender Review Panel (ETRP).

Action requested/Recommendation

2. Estates Committee is asked to note the decisions taken by ECSG referred to in point 4 of this paper and further to note the contract awards approved via the ETRP as outlined in Appendix 1 of this report.

Background and context

3. This paper enhances the 'transparency' in relation to the operation of the ECSG and the ETRP, highlighted in the effectiveness review.

Discussion

4. Since the Estates Committee last met, ECSG approved the following:

- New Biology - main contract awarded to Balfour Beatty Group Ltd in the sum of £418,422 for Pre-Award Services. Contract completion December 2021.
- King's Buildings Infrastructure, Design and Build Main Contractor to FES Support Services Ltd in the sum of £6,427,694.63 for the first Phase of this project. Contract completion scheduled 12 July 2019.

5. A list of contract awards (greater than £250,000) approved via the ETRP over the period to 1 May 2018 to 31 August 2018 is circa £26m (Appendix)

Resource implications

6. There are no additional implications. Projects already contained in the Fully Approved (fully funded) Estates Capital Plan.

Risk Management

7. There are no specific risks identified.

Equality & Diversity

8. No specific Equality and Diversity issues are identified.

Next steps/implications

9. The Estates Department will oversee any procurement processes.

Consultation

10. Convener, Director of Finance, Director of Estates, Director of Estates Development, Director of Estates Operations and Head of Estates Finance.

Further information

11. Author

Kyle Clark-Hay
Head of Estates Business Services

Presenter

Gary Jebb
Director of Estates

31 August 2018

Freedom of Information

12. This is an open paper.

**Works Contracts Awards = > £250,000
1 May 2018 - 31 August 2018**

Project Description	Appointed Contractor	Contract Award
New Biology - Main Contractor - Pre contract services	Balfour Beatty Group Ltd	£418,000.00
7 - 8 Chamber St - Main Contractor	Robertson Construction Group Ltd	£ 3,411,618.24
CSE Gender Neutral Bathroom - Main Contractor	APM Contracts Ltd	£ 270,526.17
Small Animal Hospital Dog Ward - Main Contractor	Portakabin (Scotland)	£ 362,619.95
Ashworth 1 Entrance, Foyer Accessibility - Main Contractor	Maxi Construction Limited	£ 421,281.25
27 -28 George Sq Refurb - Main Contractor	Cornhill Building Services	£ 790,830.30
JCMB Level 3&4 Lab - Main Contractor	Clarks Contracts Ltd	£ 320,064.82
Grant Institute Lecture Theatre - Main Contractor	Morris & Spottiswood	£ 270,870.99
JCMB Level 5 & 6 Refurb - Main Contract	Clarks Contracts Ltd	£ 383,774.92
Charles Stewart House Ph 3 - Main Contractor	SJS Property Services	£ 334,343.39
King's Buildings Infrastructure	FES Support Services	£ 6,427,694.63
JCMB & Appleton Tower - Data Centre Infrastructure - M&E Contractor	FES Support Services	£ 897,297.86
Darwin Tower Redevelopment - Asbestos Removal	Ductclean (UK) Ltd	£ 2,800,000.00
Rainy Hall Refurbishment - Main Contractor	Ashwood Scotland Ltd	£ 1,036,653.88
QMRI Development Imaging Technology	Thomas Johnstone	£ 770,967.75
Old College Stoneworks - Main Contractor	Ashwood Scotland Ltd	£ 762,292.34
	Total	£ 19,678,836.49

**Services Contracts Awards = > £250,000
1 May 2018 - 31 August 2018**

Project Description	Appointed Consultant	Contract Award
Lauriston Campus Redevelopment - Multi Discipline	Faithful+Gould	£ 4,509,325.36
	Total	£ 4,509,325.36

**Goods Contracts Awards = > £250,000
1 May 2018 - 31 August 2018**

Project Description	Appointed Supplier	Contract Award
Central Bioresearch Services - Sterilisers	MMM Medical Equipment Ltd	£ 211,338.86
Murchison House - Furniture Lots 1-4	Azzuro	£ 451,145.20
Central Bioresearch Services - Bedding Handling System	Tecnicplast	£ 150,676.27
Central Bioresearch Services - Lot 2 Washers	Tecnicplast	£ 174,948.01
	Total	£ 988,108.34



ESTATES COMMITTEE

12 September 2018

Waste Strategy 2018/19 – 2022/23

Description of paper

1. This paper presents The University of Edinburgh Waste Strategy 2018/19 – 2022/23 for noting. It sets out how the University will achieve its vision to becoming a zero waste University and supersedes the Recycling & Waste Management Policy 2010.

Action requested/Recommendation

2. The Committee is asked to note The University of Edinburgh Waste Strategy 2018/19 – 2022/23 (Appendix).

Background and context

3. The Strategy sets out how The University of Edinburgh will achieve its vision to becoming a zero waste University by embedding Circular Economy thinking, and putting waste prevention, reuse and recycling at the forefront of our relationship with resources. This is the first time that the University has sought to take a strategic overview of waste management, and set objectives and targets. The Strategy supersedes the Recycling & Waste Management Policy 2010.

Discussion

4. The Strategy sets out objectives and targets for waste management going forward at the University (at the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used). These are based around the principle of Circular Economy and focus on waste reduction, material reuse, recycling and composting, landfill diversion, sustainable procurement, and sustainable estate development.

5. An Implementation Plan (available as a separate document) details actions to meet the objectives and targets: individual actions are identified with further details as to how these actions will be implemented.

6. On 28 August 2018, the University Executive approved the Strategy.

Resource Implications

7. There are no immediate resource implications; however, additional funding from Estates budgets for waste management initiatives outlined in the Strategy may need to be allocated.

Equality & Diversity

8. Equality and Diversity issues will be considered throughout the implementation of the specific actions outlined in the Strategy.

Next steps/implications

9. Following noting by Estates Committee, The University of Edinburgh Waste Strategy 2018/19 – 2022/23 will be finalised and published on the University website. An action plan for implementation will be led and delivered by the Estates Department.

Consultation

10. In the development of this paper and the Strategy, consultations have taken place with EUSA Sabbatical Officers, Staff, Accommodation, Catering and Events, Estates Development and the Department of SRS. The University Executive approved on 28 August 2018.

Further information11. Authors

Kate Fitzpatrick
Waste Manager

Presenter

Grant Ferguson
Director of Estates Operations

David Brook
Head of Support Services

28 August 2018

Freedom of Information

12. This paper is open.



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

1. Introduction

This Strategy sets out how The University of Edinburgh will achieve its vision of becoming a zero waste¹ University by embedding Circular Economy thinking, and putting waste prevention, reuse and recycling at the forefront of our relationship with resources.

The Strategy provides a direction for the University to manage its material resources more effectively by thinking of waste as a resource, with the aim of achieving increased efficiency, cost savings, lower environmental impact and positive carbon reductions. The aim is to reduce the unnecessary use of raw materials, encourage reuse of products, and reduce waste to landfill through recycling, composting or energy recovery.

2. Context

The University has a large number of staff and students involved in a wide range of research and teaching activities (36,500 students and 13,500 academic and support staff (9,500 FTE)² across five main Campuses) and almost 2,000 beds at Pollock Halls of Residence, and is therefore one of the larger producers of waste in Edinburgh, producing a number of waste streams³. The Waste Office sits within Estates Operations in the Estates Department and are responsible for the management of all University waste streams by procuring, managing and monitoring centralised contracts for general waste and recycling streams, and for high risk or hazardous streams (e.g. hazardous waste, clinical and biological waste, waste electrical and electronic equipment (WEEE), etc).

The University of Edinburgh's academic structure is based on three Colleges containing a total of 20 Schools, plus three Support Groups. The University has a broad spectrum of activities across its estate including general teaching spaces, offices, laboratories, halls of residences, conference and catering facilities, student unions and trades workshops. Many of these see significant variations in the amount of waste produced during the year but in general the quantities of waste produced is dependent on student term-times. The Edinburgh Festival Fringe, which is held annually during August, also affects the quantity of waste generated as many University venues are used during this period.

The University's Strategic Plan 2016⁴ clearly outlines the University's commitment to sustainability and social responsibility through the inclusion of a dedicated vision. The Plan

¹ The University will aim to becoming zero waste as far as practically possible. Some waste will always need to be managed for disposal of for environmental, health and safety, or technical reasons.

² 2016/17 data (at the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used).

³ The majority of the waste produced at The University of Edinburgh falls under the following categories: general, dry mixed recyclables, food, clinical and biological, radioactive, confidential, hazardous, and WEEE. However, the type of waste arising from the University operations are wide and varied.

⁴ <https://www.ed.ac.uk/governance-strategic-planning/strategic-planning/strategic-plan/get-your-copy>

states that *'As a truly global university, rooted in Scotland's capital city, we make a significant, sustainable and socially responsible contribution to the world.'*

The Strategy supports our Estates Vision 2017-2027⁵ with regards to *'planning an optimal, accessible estate to meet the future requirements of our students and staff'*. The University has also committed to become carbon neutral by 2040, and the Climate Strategy 2016-26⁶ lays out a comprehensive whole institution approach to climate change mitigation and adaptation in order to achieve this ambitious target, and recognises that waste management contributes to our carbon footprint. In adopting an integrated approach to reporting including natural capital, The University's Annual Report and Accounts for the year to 31 July 2017⁷ states a long-term value to *'embrace the circular economy'*.

The throwaway culture in the UK has received increasing interest over the past couple of years, and this is a subject which The University of Edinburgh must address. In January 2018, the UK Government launched their 25 Year Environment Plan which aims to improve the UK environment over a generation. The paper is wide-ranging including resource management, plastics recycling, sustainability and energy management. Of note, is that avoidable plastic waste should be eliminated by 2042⁸. As well as single-use plastics e.g. cups, straws, etc, another symbol of our throwaway society are disposable cups. In January 2018, the Government announced that they will consider a 25p levy on disposable cups, but effectiveness of such a policy would need to be considered before it is implemented across the UK.

The Scottish Government's 'A Circular Economy Strategy for Scotland'⁹ sets out the ambition for a circular economy, where products and materials are kept in high value use for as long as possible. There are significant environmental benefits to a more circular economy: from reducing greenhouse gas emissions, relieving pressure on water resources, virgin materials and habitats, and limiting pollution of air, soils and watercourses. The Scottish Government's Climate Change Plan¹⁰ highlights the desire for second hand goods to be seen as a good value, mainstream option and for products to be designed for longer lifetimes. The following Scottish Government targets are set out in the Plan and this Strategy aims to support these:

- Ending landfilling of biodegradable municipal waste by January 2021 and reducing the percentage of all waste sent to landfill to 5% by 2025.
- By 2025, reduce food waste by 33%, and recycle 70% of all waste.
- By 2035, aim to be delivering emissions reductions through a circular economy approach.

Extensive waste management legislation exists at Scottish, UK and European level and various technical documents produced by the UK or Scottish Government and/or the Regulator, must to be adhered to (as detailed in Appendix 1).

⁵ <https://www.edweb.ed.ac.uk/estates/staff/info-est-dept-staff/estates-vision>

⁶ <https://www.ed.ac.uk/about/sustainability/themes/climate-change/climate-strategy/read>

⁷ <https://www.ed.ac.uk/files/atoms/files/uoae-annual-report-and-accounts-2016-17-0.pdf>

⁸ China banned 24 types of solid waste material (including unsorted paper and plastics) on 1 January 2018, meaning that recyclables may have to be temporarily stockpiled, or even landfilled, as recycling companies may find it difficult to find alternative markets.

⁹ <http://www.gov.scot/Resource/0049/00494471.pdf>

¹⁰ <http://www.gov.scot/Resource/0053/00532096.pdf>

3. Scope

The scope of this Strategy is based on operational control: targets include all The University of Edinburgh managed waste on our academic estate (including waste from Accommodation, Catering and Events (ACE) retail catering), as well as those for ACE managed student accommodation¹¹ and catering¹² at Pollock Halls.

The Estates Department Waste Office manage all waste from across the estate (including Edinburgh University Students' Association (EUSA)). As the Waste Office manages the contracts for ACE retail catering, this is included in the Strategy targets for the academic estate. ACE manages waste arising from University managed accommodation and catering at Pollock Halls and targets are included for these arisings ((term-time arisings only (September to May inclusive). ACE also has numerous other managed sites across the City (approximately 8,000 beds in total in 2016/17¹³) for which the City of Edinburgh Council collect waste and therefore have operational control, and therefore targets cannot be set for these properties. However, the Strategy principles, values and approach are relevant for all ACE managed student accommodation as well as any contractors working on the University estate and affiliated University companies.

4. Objective and Targets

The University's approach to waste is an area which students, staff and wider community stakeholders are increasingly interested in. Circular economy research carried out in 2015¹⁴ highlighted that Higher Education Institutions such as The University of Edinburgh play a pivotal role in a transformation to a circular economy. They can supply cutting edge research that promotes the adoption of circular economy initiatives and educate designers, engineers, future business leaders, procurement decision makers, potential market influencers, policy makers, and many others; in addition, they have leverage in their own supply chains and operations.

Development and promotion of practical initiatives relating to circular economy is essential in order to fulfil the vision of becoming a zero carbon University, alongside supporting research and teaching on circular economy thinking through collaborative projects with industry.

Researchers found that a range of research and teaching on circular economy thinking is taking place at the University, and some practical initiatives exist which could be developed and promoted further – including current practices and policies within the University, initiatives such as world-leading research by the School of Chemistry on urban mining, the Warp It re-use portal for staff, the student led reuse cooperative SHRUB (Swap and Reuse Hub), activities of the UK Biochar Research Centre (which uses waste to enhance soils), reuse of furniture across the estate by the Furniture Office, the PC Reuse Project (which reuses PCs and other IT equipment internally), and a trial coffee ground collection service with an ecoprise who process it to create an all-natural, 100% recycled plant food. In addition, ACE continues to promote and support reuse, and partners with local community groups and charities. Seeing the University as a 'Living Lab' by connecting our research, learning, teaching and operations, can provide

¹¹ Baird, Ewing, Grant, Lee, Turner, Holland, John Burnett Houses and Chancellor's Court.

¹² JMCC.

¹³ At the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used.

¹⁴ https://www.ed.ac.uk/files/atoms/files/zws_uae_circular_economy_report_-_final_may_2015.pdf

opportunities for funding and industry engagement as well as enhancing the student experience.

Robust, flexible and acceptable targets are required that suit the University's changing business needs and performance. The strategic targets for 2021/22 are detailed in the table below, with the background to our waste management performance detailed in Appendix 2¹⁵.

	Academic Estate ¹⁶	ACE Managed Student Accommodation at Pollock Halls ¹⁷	ACE Managed Student Catering at Pollock Halls
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>
Recycling and composting ¹⁸	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 2021/22 (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 2021/22 (against a baseline of 57 tonnes in 2016/17).
Landfill diversion	Maintain percentage diverted from landfill at 99%.		
Sustainable procurement	Support improvement and innovation in supply chain waste to contribute to Scottish and global circular economy ambitions.		
Sustainable estate development	Promote resource efficiency via the effective management and reduction of construction waste with targets specified, monitored and reported in site specific management plans.		

The following sections introduce the targets; an Implementation Plan detailing how these targets will be met is available as a separate document.

¹⁵ At the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used.

¹⁶ 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).

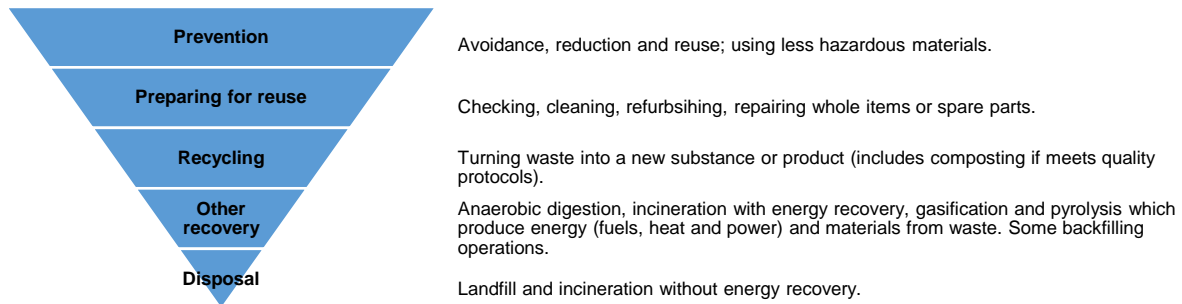
¹⁷ Based on total term-time waste arisings in 2016/17 (September to May inclusive), and 1,979 beds at Pollock Halls (at the time of writing 2017/18 data was not available, and therefore baseline data from 2016/17 was used).

¹⁸ Includes anaerobic digestion.

4.1 Waste Reduction, Reuse, Recycling and Composting

The University has a commitment to follow the waste hierarchy and implement initiatives that encourage waste producers to reduce the overall waste that they produce, and prevent waste production wherever possible.

The waste hierarchy ranks waste management options according to the best environmental outcome taking into consideration the lifecycle of the material i.e. the principal of treatment of waste in the following order: prevention, preparing for reuse, recycling, other recovery and disposal.



4.2 Sustainable Procurement

The University's sustainable procurement goal is to procure goods and services in ways that maximise efficiency and effectiveness while minimising social, environmental and other risks. When buying through the University's purchasing systems, or using other University contracted suppliers, students and staff can be confident that environmental and social issues have been taken into account. Priority is given to social responsibility and sustainability and whole life costs when selecting suppliers and awarding contracts. The University has adopted Scottish Government tools to embed environmental, economic and social sustainability into our public procurement activity. These robust measures help the University to meet its sustainability commitments and fulfil the Sustainable Procurement Duty by analysing each spend area and linking practical guidance for each procurement stage.

4.3 Sustainable Estate Development

An extensive programme of new buildings and estates improvements is planned for the University over the coming decade, therefore it is imperative to embed sustainability in the design process and practice.

The construction of new University buildings and refurbishment of our existing estate are important contributors to University sustainability. Key objectives are BREEAM Excellent, whole life costing and the City of Edinburgh Council Edinburgh Standards for Sustainable Building Supplementary Planning Guidance. The Estates Department T46 Sustainability Strategy is being redeveloped to reflect the priorities for the University. The current version¹⁹ states that all BREEAM waste credits must be achieved in terms of construction waste (percentage of construction site waste diverted from landfill, reduction of construction and demolition waste to

¹⁹ http://www.ed.ac.uk/files/atoms/files/t46_sustain_strategy_110303.doc

landfill, and provision for recycling during occupation). Targets for materials are also included stating that design and specifications should ensure a minimum recycled content of at least 20% by value, and that the embodied lifetime environmental impact of all materials should be reduced by selecting on the basis of environmental preference, e.g. recycled content, low maintenance, etc.

The consultation process represents the most important aspect of project delivery and a Project Delivery Collaboration, Communication and Consultation Schedule is implemented for every project. This process aligns with the current RIBA stage structure as incorporated in the new Estates Project Delivery Process Map, and the Waste Office is consulted at various stages from concept design through to fit out. Sustainable development design principles are incorporated into all projects from conception through to construction and operation. Tender documents and contracts embed these through unambiguously worded requirements and project management will ensure the designs are delivered through all stages of projects, with commissioning demonstrating compliance against performance targets.

Contractors should develop a Site Waste Management Plan on any project before construction work begins which would include the following:

- A description of each waste type expected to be produced in the course of the project
- An estimate of the quantity of each different waste type expected to be produced
- Identification of the waste management action proposed for each different waste type, including reusing, recycling, recovery and disposal

5. Monitoring and Review

The Waste Office will manage the delivery of the Waste Strategy to ensure it remains current and relevant with the local, national and European context, as well as to ensure compliance with government policy and guidance. The University requires all staff, students, Service Providers and anyone else making use of University premises to comply with this Strategy; standards expected are detailed further in Appendix 3, with responsibilities and organisational arrangements detailed in Appendix 4.

Reporting will be to the Estates Management Group and SRS Committee, with input from the Sustainability Strategy Advisory Group (SSAG), under which a Waste Sub-group will sit; this will consist of staff from the Estates Department, Department for Social Responsibility and Sustainability (SRS), Procurement Office, Health and Safety Department, ACE and EUSA.

The Waste Strategy will be reviewed in 2021.

The Waste Sub-group will review the following quarterly:

- Progress against objectives and targets – a report will be delivered by the Waste Manager for each target.
- Recommendations on changes required to objectives or targets – upon discussing each objective, the relevance will be evaluated and changes discussed.
- Legislation, policy and targets – a review of any significant changes in policy that may affect the objectives or indeed may require the addition of new ones.

- Operational infrastructure – any changes to the estate or operations that have been made that will have an effect on objectives or any additional operations that may be considered to assist the delivery of the objectives.
- Resourcing – a review of resourcing in order to meet objectives.
- Waste producers – consideration of any changes in waste arisings.
- Strategy refresh decisions – if changes are required, these will be proposed to the Estates Management Group.

Appendix 1 – Legislation

The University has a legal obligation, a Duty of Care, to be able to demonstrate that it knows how its waste is being managed. Waste movements are tracked through SEPA Waste Transfer Notes (non-hazardous waste) and Consignment Notes (hazardous waste); these ensure that all waste is managed responsibly from where it is produced to the authorised recovery or disposal facility.

Extensive waste management legislation exists at Scottish, UK and European level. In addition, various technical documents produced by the UK or Scottish Government and/or the Regulator, must to be adhered to. The key legislation related to this Strategy are as follows:

- The Waste (Scotland) Regulations 2012
- The Landfill (Scotland) Amendment Regulations 2013
- The Waste Electrical and Electronic Equipment (Amendment) Regulations 2015
- Environmental Protection Act 1990
- The Environmental Protection (Duty of Care) (Scotland) Regulations 2014
- Special Waste Amendment (Scotland) Regulations 2004
- Animal By-Products (Enforcement) (Scotland) Regulations 2013
- The Waste Batteries and Accumulators (Amendment) Regulations 2015

Appendix 2 – Background Performance

The University of Edinburgh has made significant progress in terms of waste management since 2014/15²⁰ across the estate as highlighted in the figures below.

The University produces over 3,500 tonnes of waste annually, and already undertakes numerous waste reduction and reuse initiatives. There is a commitment to encouraging and enabling the reuse of University-owned resources by helping staff and students locate and make further use of items which have been identified as redundant by their primary user group. Reuse rate is difficult to capture, and in all likelihood the rate will be higher as reuse will be occurring organically within the University and therefore this data will not be captured.

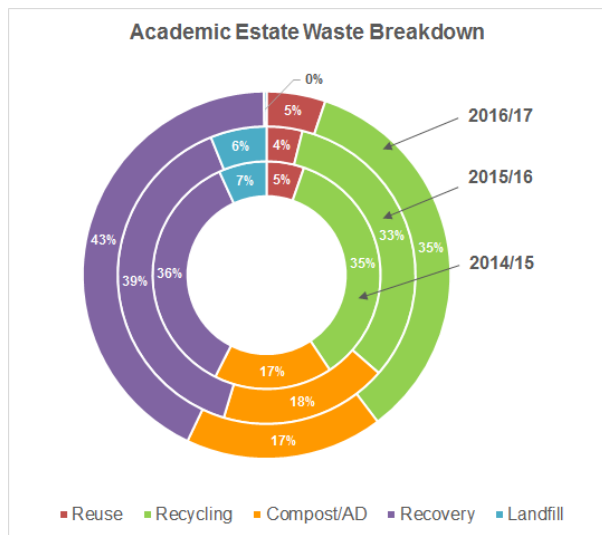
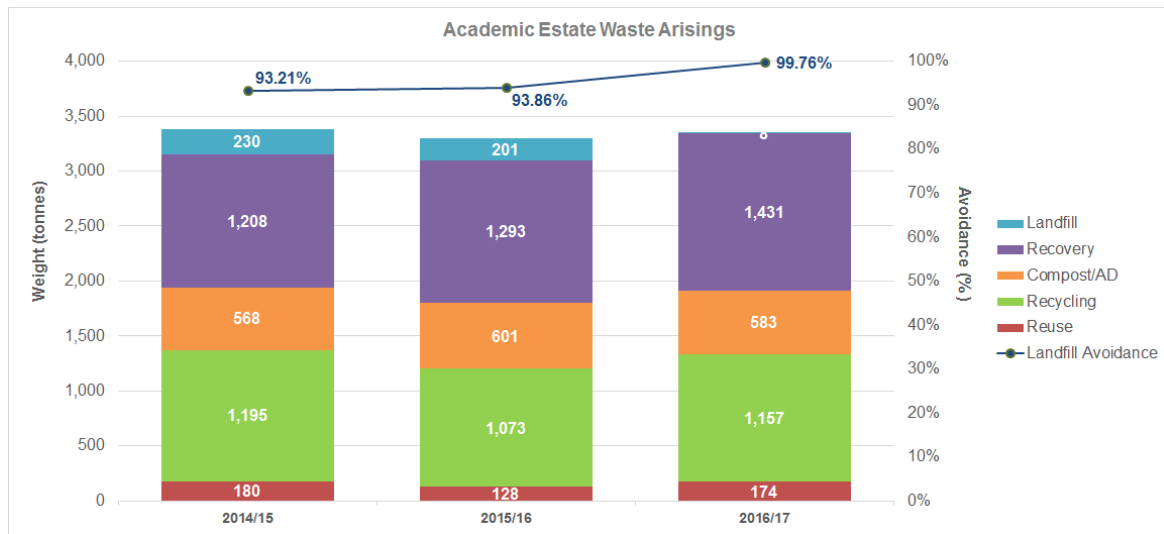
Within ACE managed student accommodation at Pollock Halls, as much equipment and furniture as possible is reused internally, and where this is not possible they have partnerships with local charities so that others can benefit from their waste. At the end of term, all students' waste is collected and stored over the summer months and offered free of charge to new students at the beginning of the academic year in a Free Shop. Any items not claimed in the Free Shop are redistributed to local charities.

There is an objective to provide means across the University to recycle and compost as many materials as possible in order to produce an output which is clean and free from food waste contamination, thereby providing a valuable resource for market recovery of plastics, metals, paper, card and glass.

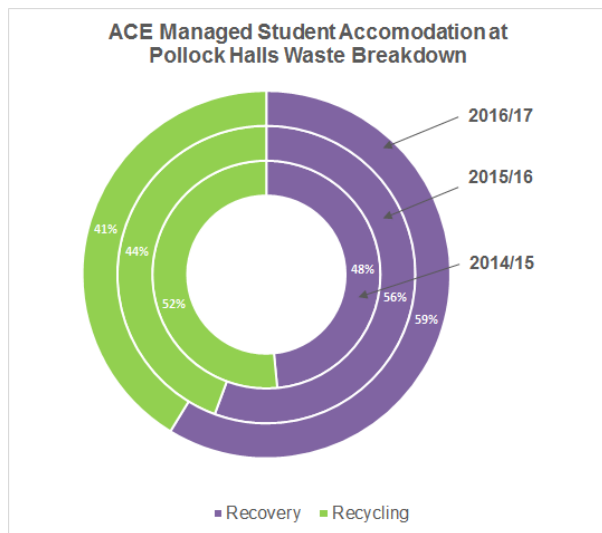
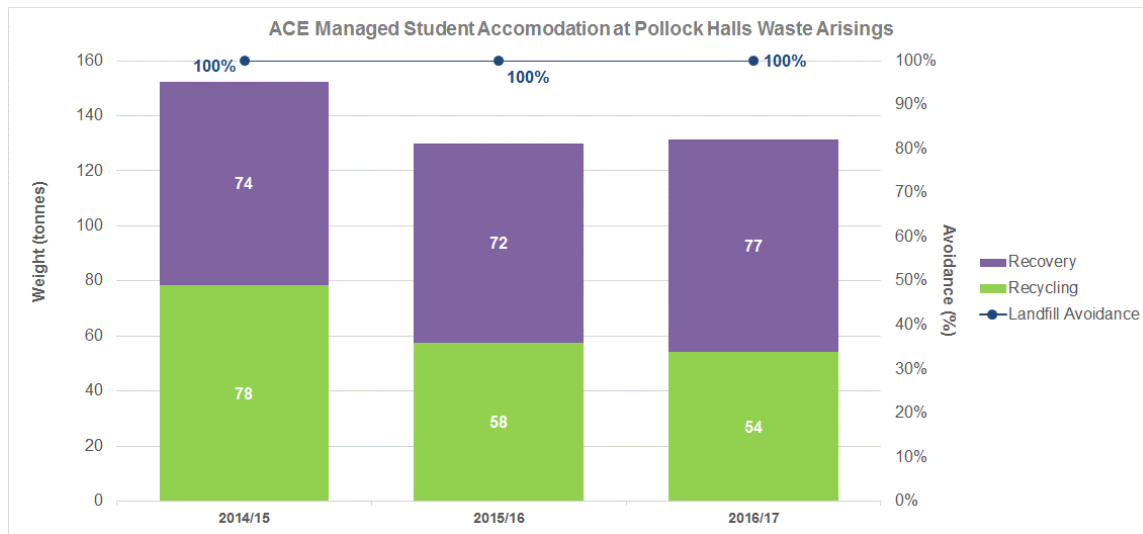
The University already achieves a high diversion from landfill rate. General waste is collected by our waste contractor to produce RDF (refuse derived fuel) for use in energy recovery facilities, and therefore is diverted from landfill. Other wastes such as clinical and biological, radioactive, and hazardous, are collected via our licensed Contractors for further treatment.

²⁰ In 2014, the University embarked on a new waste contract which resulted in the need to re-stream high volume waste types. Additionally, the then pending legislative changes (which came into effect on 1 January 2014) resulted in an early requirement of third party receivers of our recyclate for a level of quality higher than we were producing. Therefore the data prior to this date is not comparable and is not reported.

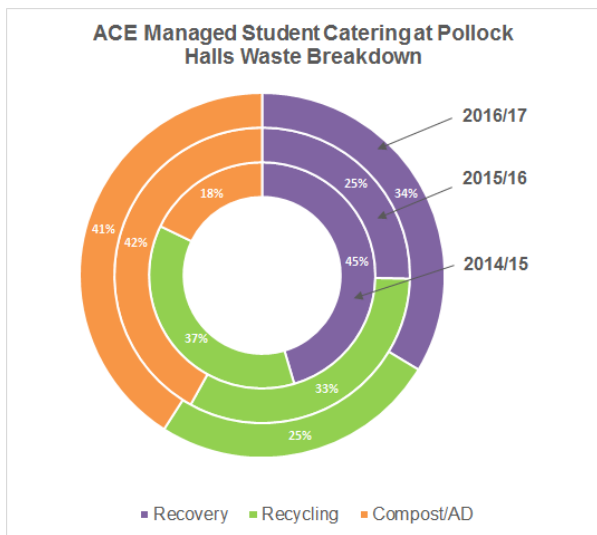
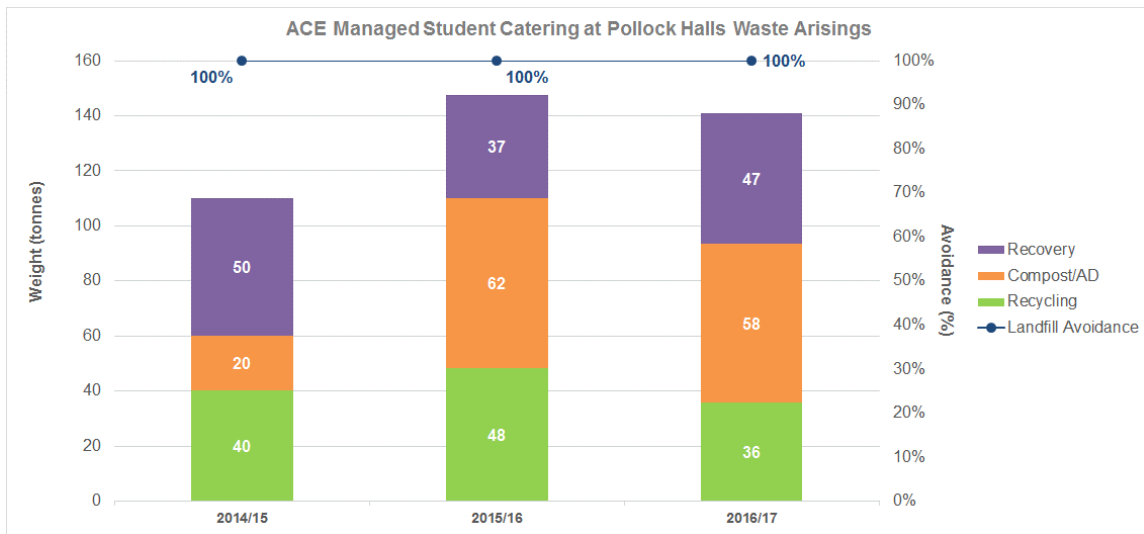
Academic Estate



ACE Managed Student Accommodation at Pollock Halls



ACE Managed Student Catering at Pollock Halls



Appendix 3 – Standards Expected

The University requires all staff, students, Service Providers and anyone else making use of University premises to comply with this Strategy. In particular, it is expected that all members of the University community, tenants in University premises and University appointed Service Providers will adhere to the following standards:

1. Waste should be prevented or minimised wherever possible. If produced, opportunities for repair, composting and reuse should be enabled when appropriate, and only then should recycling or energy recovery be considered.
2. Waste must be stored, carried, processed, treated or disposed of in accordance with the principles of Duty of Care.
3. Waste must be securely stored in compliant and suitable containers and locations pending uplift. In particular:
 - The fabric and construction of the container must be resistant to the nature of the waste (e.g. corrosive, sharps, etc.) and suitable for the storage environment.
 - The container will be securely sealed to prevent accidental spillage/leakage.
 - Adequate security precautions should be taken to prevent loss, theft, vandalism, or unauthorised access.
 - Segregation of waste should take place to prevent mixing of incompatible materials and to allow for recycling.
 - Waste collections should not prevent safe access or egress of people.
 - Waste should not be stored in plant or electrical switch rooms, near to heat or ignition sources, or hinder access to equipment.
4. Waste removed from University premises must only be transported by persons or Service Providers who are authorised to do so and subsequently treated, processed or disposed of in suitably authorised and approved facilities.
5. Any discharge to sewer from University premises that may present a substantially greater risk than domestic sewage must have the prior agreement of the statutory responsible bodies via the Estates Department.
6. Where it is shown that this Strategy has not been adhered to, (potentially) resulting in the University becoming legally vulnerable or its reputation being adversely affected, the Director of Estates shall take such steps as may be necessary to bring the situation back into compliance as soon as possible. Associated costs incurred in carrying this out may be recovered from the College, School, Unit or tenant concerned.

Appendix 4 – Organisation and Management

Responsibilities and organisational arrangements for this Strategy are in line with those defined in the University Health and Safety Policy and agreed by the University Court.

The University Court has overall legal responsibility for Waste Management at the University.

Within waste legislation (in particular the Duty of Care), individuals also retain a responsibility for disposal of wastes within their control.

The responsibilities and organisational arrangements for this Strategy are further defined in the following sections.

All Heads of Schools/Units

Responsible for:

1. Ensuring that this Strategy is disseminated within their area of responsibility.
2. Ensuring that School members are equipped to implement this Strategy, including identifying training needs and ensuring training appropriate to each individual's responsibility is available and attained.
3. Ensuring that all staff, students, visitors and School/Unit purchase goods or services from Service Providers who comply with this Strategy.
4. Ensuring either that only authorised central waste contract services are used or, if it is necessary to procure School/Unit contract services, ensuring that they fulfil our Sustainable Procurement Duty agreed by the Director of Procurement, and comply with this Strategy, and that an record is sent to the Waste Manager annually and/or when requested.
5. Non-hazardous wastes (central contracts):
 - Ensuring that all redundant IT equipment, and other suitable equipment, is reused/cascaded where possible.
 - Ensuring that non-hazardous waste is removed from University premises via centralised contracts.
6. Hazardous wastes:
 - Ensuring that no hazardous wastes are disposed of through the general waste or recycling streams or to drains.
 - Ensuring Duty of Care compliance including appropriate segregation, inventorying, recording, describing and storage.
 - Nomination of 'Responsible Person(s)' to coordinate waste disposal for any radioactive, clinical and biological, chemical or otherwise hazardous wastes.
 - Informing the Waste Manager who the nominated 'Responsible Person(s)' is and updating records when the 'Responsible Person(s)' changes.
7. Ensuring that waste management practices and procedures within the School/Unit are audited regularly and that any changes that may be required as a result of these reviews are carried into effect.
8. Encouraging staff, students and visitors to cooperate with associated campaigns, projects and initiatives.
9. Enabling the investigation of any incidents or accidents relating to waste management.

Director of Estates

Responsible for:

1. Provision of an overall framework of guidance to the University on waste management.
2. Provision of an overall framework of advice to the University on waste management procurement.

Waste Manager

Responsible for:

1. Provision of advice and guidance to the University community on waste management.
2. Coordinating the procurement and provision of appropriate and authorised central waste contract services for the University and where appropriate, tenants within University buildings.
3. Implementation, monitoring and auditing of centralised waste management systems, and overseeing the day-to-day delivery of centralised waste management services.
4. Maintaining a list of all Service Providers appointed to carry out waste-related activities and ensuring that they are procured in compliance with the our Sustainable Procurement Duty.
5. Advising all Service Providers that they must comply with the Duty of Care; that they must comply with this Strategy, or, satisfy the University that their own procedures will achieve legal compliance.
6. Auditing all waste management Service Providers working for the University.
7. Setting performance indicators and targets for waste management, and compiling data and statistics to enable annual benchmarking against established performance indicators and reporting against agreed targets.
8. Reporting to the University on progress against the performance indicators and targets.
9. Provision of appropriate training for Estates Department personnel who have responsibilities for waste management and assisting in the specification of relevant goods or services.
10. Coordinating the gathering of, and supplying of, all relevant information to appropriate enforcement agencies when information relating to waste management is requested.
11. Attaining and reporting on waste Management Permits/Licences/Exemptions as required.
12. Investigation and resolution of any incidents or accidents relating to waste management.
13. Liaising with appropriate enforcement agencies.
14. Signing annual Waste Transfer Notes for central contracts on behalf of the University.
15. Compiling and holding annual Waste Transfer Notes and Special Waste Consignment Notes for centrally managed waste collections.
16. Monitoring the performance of the Service Providers against Service Level Agreements.
17. Maintaining a contact list of Responsible Persons as provided by Heads of Schools.
18. Reviewing this Strategy.

Nominated Responsible Persons

Responsible for:

1. Signing School/Unit Waste Transfer Notes and Special Waste Consignment Notes as necessary.
2. Establishing and maintaining a record keeping system in order that the movements of all wastes can be tracked and make these records available for audit by the Estates Department.
3. Supplying information and paperwork on all wastes disposed of as requested by the Estates Department.
4. Attending appropriate training and disseminating information to other School members as appropriate.

Staff/Students/Researchers/University Tenants

Responsible for:

1. Completing and adhering to the waste disposal section within University Risk Assessment forms for all relevant activities.
2. Reusing, recycling and/or disposing of wastes responsibly through the appropriate stream in accordance with University policy and procedures and all legal requirements.
3. Reporting any problems with waste collection schemes to the Waste Office.
4. Attending appropriate training.

Service Providers

Responsible for:

1. Legal and technical compliance with all relevant statutory waste legislation or Scottish Government policy.
2. Arranging for the safe and compliant storage and collection of wastes generated through their own activities on University premises or as appropriate, where acting on behalf of the University under relevant supply or service contracts.
3. Reusing, recycling and/or disposing of waste responsibly in accordance with University policy and procedures, or, through a scheme approved by the University.
4. Making available to the University copies of Waste Transfer Notes, Special Waste Consignment Notes and other waste related records if required.
5. Providing service levels, activity reports/statistics or risk analyses, as specified under service contracts or supply agreements with the University.
6. Informing the University appointed contract manager of any risk of breach of legislation identified whilst working for the University or on our premises.

Appendix 5 – Integration with School Procedures and Documentation

All Colleges and Schools/Units should use this Strategy either to produce their own area specific procedures or directly in the induction and training of staff, researchers and students. Where local guidance is being produced, it must meet the standards and requirements set out in this Strategy and be approved by the Waste Manager.

Waste Management procedures must be included in induction programmes and training programmes.

School procurement procedures must also include relevant waste management statements.

Local procedures must be up to date, clearly written, displayed in relevant areas, take account of different levels of training, knowledge and experience and be available to all relevant students, staff, researchers, visitors, etc. Where Schools are large, or cover more than one site, it may be necessary for procedures to be developed by local administrative units to ensure effective waste management.



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 waste as well as

Actions		
		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>
Recycling and composting³	Increase recycling/composting rate to 80% against a	Increase recycling rate to 80% against a	Increase recycling/composting rate to 80% against a

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).

³ Includes anaerobic digestion.

	2016/17 baseline of 52%.	2016/17 baseline of 41%.	2016/17 baseline of 66%.
Composting/AD	Reduce food waste by 40% to 36 tonnes in 2021/22 (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 2021/22 (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 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	Encourage reuse of lab or clinical equipment internally via Warp It, or recycled or reused externally via our WEEE contractor.

Actions		
	assets (as opposed to sending for recycling or reuse via a licensed waste contractor)	<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 recyclate 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 recyclate 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.
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.

Actions		
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> <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>

Actions		
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

Actions		
		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 at point of delivery or on request	Work with the Procurement Office to implement supplier take-back to reduce the overall tonnage of 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	<p>Work with Estates Development and Procurement to ensure that all contractors conduct pre-demolition waste audits to identify major waste streams and 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

Actions		
		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.



ESTATES COMMITTEE

12 September 2018

**Estates Department – Sub-Delegation of the University’s
Delegated Authority Schedule**

Description of paper

1. This paper provides Estates Committee with an update to the sub-delegation arrangements within the Estates Department that reflect the University’s Delegated Authority Scheduled (DAS) in light of the revised management structure within the Estates Department.

Action requested/Recommendation

2. Estates Committee is asked to note the content of the report coupled with the sub-delegation arrangements within the Estates Department as set out in Appendix 1 to this report.

Background and context

3. As a result of the implementation of the Estates Department revised management arrangements, it is key that the sub-delegation of the University’s DAS is reflective of these new arrangements in order to provide clarity and transparency in relation to the specific requirements of the Estates Department.

Discussion

4. The Estates Department Sub-Delegation of the University’s DAS sets out specific arrangements in relation to how the DAS will operate within the Estates Department. This describes the Estates Department arrangements for specific sections of the University’s DAS. All other delegated authority within the Estates Department will operate as set out within the University’s DAS. The University’s current DAS was approved by University Court on 5th December 2016.

5. The specific sections of the DAS are covered within the Estates Department Sub Delegation are:

- Section 3 – Land and Property – Property Transactions
- Section 5 – Procurement

Further the Estates Department Sub-Delegation schedule provides clarity, by job role, in relation to role holders delegated authority levels.

Resource implications

6. There are no resource implications as a result of the recommendations contained within this report.

Risk Management

7. There are no specific risks identified.

Equality & Diversity

8. No specific Equality and Diversity issues are identified.

Next steps/implications

9. The Head of Estates Business Services will write to all staff to confirm their specific level of delegated authority and ensure that staff are aware of their responsibilities. The Head of Estates Finance will ensure that the Estates Sub-Delegation is reflected within the financial processes.

Consultation

10. Estates Management Group.

Further information

11. Author

Kyle Clark-Hay
Head of Estates Business Services

Presenter

Kyle Clark-Hay
Head of Estates Business
Services

31 August 2018

Freedom of Information

12. This is an open paper.

Estates Department Sub Delegation of the University's Delegated Authorised Schedule

The following document sets out specific arrangements in relation to how the University's Delegated Authority Schedule (DAS) will operate within the Estates Department. This describes the Estates Department arrangements for specific sections of the University's DAS. All other delegated authority within the Estates Department will operate as set out within the University's DAS. The University's current DAS was approved by University Court on 5th December 2016.

DAS Section 3 - Land & Property - Property Transactions

The **Policy & Resources Committee (PRC)** approves the Estates capital plan as part of the business planning process, advises the University Court on any matters of concern and recommends to the University Court any proposals for significant subsequent amendments to the agreed estates programme.

The **Estates Committee** has Delegated Authority to approve land & property transactions/projects consistent with the direction of the Estates capital plan up to £10m. Estates Committee does not have authority to approve projects which require resource out with the University Business Plan. Such projects must be referred to PRC and Court for approval.

Approved transactions can be signed by:

	Convener of Estates		Head of Corporate Services	Director of Estates
Formal acceptance of contracts and acquisition of all goods,	£10m		£5m	£2m
Acquiring and disposing of the ownership	£10m		£5m	£2m
Entering into or exiting from leases for	£10m <30	£5m >10	£5m <10	£2m <10

- The **Director of Finance** must be notified in advance of creating any financial commitment for transactions over £1m and all lease arrangements.
- The **Director of Legal Services** should be consulted for all contracts involving Land and Property Law over £1m or where there are matters of concern.
- Approval from the **Scottish Funding Council** must be sought for the disposal of property purchased with public funds.

The Estates Department Sub Delegation Schedule

Formal acceptance of contracts and acquisition of all goods, services and works

In the absence of the Director of Estates only, the following signatories have the delegated authority to sign for Estates Committee approved transactions up to £2M:

Director of Estates Development
Director of Estates Operations

The Estates Tender Review Panel operates as a governance gateway for any financial commitment above £50K (based on approved budget commitments through the University's governance framework and/or delegated authority schedule).

Delegated Authority in Respect of Estates Committee Decisions

In the absence of the Director of Estates only, the following have the delegated authority to act on behalf of the Director of Estates in their absence in respect of any Estates Committee or Estates Committee Sub Group decisions:

Director of Estates Development
Director of Estates Operations

Acquiring and Disposing of Ownership in Land and Buildings

The authority for acquiring and disposing of the ownership in land and buildings will not be sub delegated. This will remain strictly as per the University Delegated Authority Schedule.

Entering into or Exiting from Leases for Land and Buildings

The authority for entering into or exiting from leases for land and buildings will not be sub delegated. This will remain strictly as per the University Delegated Authority Schedule.

DAS Section 5 - Procurement

Procurement is the acquisition, whether under formal contract or otherwise, of goods, services and works from third parties and must adhere to the University Procurement Strategy, applying the principles and procedures under public procurement law. Procurements of all types must be planned to take account of legal duties, including social, economic and environmental impact; and to be transparent, apply equalities duties and anti-corruption policy to create the most economically advantageous balance of quality and cost.

From an Estates Department perspective all procurement activity must be actioned in line with the Estates Department Procurement Protocol.

Estates Delegated Authority Level by Job Role

The following table outlines the high level sub delegation authority levels by Estates Department job role. This is not the complete list of delegation – a full list is available from Estates Finance who also hold information in relation to the Estates systems authorisation levels.

Job Title	Authorisation Level
Director of Estates	£2M
Director of Estates Development	£500K but authorised up to £2M in absence of Director of Estates for EC approved transactions.
Director of Estates Operations	£500K but authorised up to £2M in absence of Director of Estates for EC approved transactions.
Head of Estates Planning	£500K
Head of Construction	£500K
Head of Estates Finance	£100K
Head of Minor Projects	£100K
Head of Estates Business Services	£50K
Organisational Development and Change Manager	£50K
Estates Development Manager	£50K
Project Manager	£50K
Head of Maintenance Operations	£50K
Building Services Manager	£50K
Head of Support Services	£50K
Head of Energy and Utilities	£50K
Support Services Area Manager	£25K
Minor Works team	£25K
Controls Manager	£25K
Health and Safety Manager	£10K
Assistant Controls Manager	£10K
Energy Manager	£10K
Furniture Manager	£10K
Landscape Manager	£10K

Job Title	Authorisation Level
Transport Manager	£10K
Parking Manager	£10K
Waste and Recycling Manager	£10K
Security Manager	£10k
Estate Surveyors	£10K
Area Team Leaders	£5K
Estates Business Services Staff	£2K



ESTATES COMMITTEE

12 September 2018

**Development & Alumni
Naming of a Lecture Theatre in the Edinburgh Medical School**

Description of paper

1. In line with the recently confirmed Naming Policy, this paper proposes the naming of a significant teaching space after a major supporter and widely recognised business and philanthropic leader, Dame Stephanie (Steve) Shirley.

Action requested/Recommendation

2. Estates Committee is invited to approve the proposal.

Background and context

3. Dame Stephanie (Steve) Shirley is a highly successful IT entrepreneur and ardent philanthropist. Her philanthropy is based on her strong belief in giving back to society, focusing primarily on autism. She had also initiated a number of projects in IT that are pioneering by nature, and strategic in societal and economic impact.

4. Dame Steve has been a staunch supporter of autism research nationally both in terms of philanthropy and advocacy. This includes significant philanthropic support for this University, given our internationally-leading work on autism, as detailed in the accompanying Appendix.

5. The respect with which Dame Steve is held in Edinburgh was clearly demonstrated at the University's recent Engage Invest Exploit (EIE) 2018 conference, where her keynote speech to a packed McEwan Hall received an extraordinary ovation.

6. This is a case where we wish to name a facility for a combination of philanthropic commitment, while also recognising an individual of great distinction with close connections to Edinburgh.

7. Estates Committee is requested to approve the College of Medicine and Veterinary Medicine's (CMVM) proposal to rename one of the two Main Lecture Theatre in the Chancellor's Building at Little France, "The Dame Steve Shirley Lecture Theatre", for a duration of a minimum of 25 years.

Resource implications

8. There are no resource implications associated with this paper.

Risk Management

9. There are no immediate risk management issues relating to this paper.

Equality & Diversity

10. The naming will help to address a current imbalance in gender equality in terms of naming of facilities across campus.

Next steps/implications

11. Estates Committee is asked to approve the proposal.

Consultation

12. The paper has followed the relevant process under the University of Edinburgh Naming Policy, including consultation with those listed in the Policy.

Further information

13. Authors

Eleana Kazakeou, Projects and Policy
Officer, Development & Alumni

Presenter

Dr. Catherine Elliott, College Registrar,
CMVM

Chris Cox, VP Philanthropy and
Advancement

September 4, 2018

Freedom of Information

14. This is a closed paper until approved by the Estates Committee. Appendix 1 to this paper should remain closed as disclosure risks breaching Data Protection regulations.