



**Sustainability Strategy Advisory Group (SSAG)**

**Thursday 30 January 2020, 2pm**

**Balcony Room, Old Moray House**

**AGENDA**

- 1 Minute** **A**  
To approve the minute of the previous meeting on 8 October 2019
- 2 Matters Arising**  
To raise any matters arising not covered on the agenda or in post-meeting notes
- 3 Annual SRS Report** **B**  
To note and discuss a paper from the Student Engagement, Events & Reporting Programme Manager
- 4 Scottish Government Public Bodies Duties Report 2018-19** **C**  
To note and discuss a paper from the Research & Policy Manager (Climate Change and Biodiversity)
- 5 Scottish Government Public Bodies Duties Reporting Consultation** **D**  
To note and discuss a paper from the Research & Policy Manager (Climate Change and Biodiversity)
- 6 Biodiversity / Adaptation Update** **E**  
To note and discuss a paper from the Research & Policy Manager (Climate Change and Biodiversity)
- 7 Sustainable Procurement Update** **F**  
To note a paper from the Director of Procurement
- 8 Energy Quarterly Report** **G**  
To receive a report from the Head of Energy & Utilities Management
- 9 SRS Programmes Quarterly Report** **H**  
To receive a report from the Deputy Director of SRS
- 10 Waste, Reuse & Recycling Quarterly Report** **I**  
To receive a report from the Waste Manager
- 11 Travel & Transport Quarterly Report** **J**  
To note a report from the Travel & Transport Manager
- 12 SFC – Climate Emergency Collaboration Challenge funding** **Verbal**  
To receive an update from the Director of SRS
- 13 Update on the Climate Emergency and Strategic Direction on Energy** **Verbal**  
To receive an update from the Director of SRS
- 14 Any Other Business** **Verbal**  
To consider any other matters from Group members

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**MINUTE OF A MEETING** of the Sustainability Strategy Advisory Group held in the Ochil Room, Charles Stewart House on Tuesday 8 October 2019.

**Members:** Dave Gorman, (Convener) Director of Social Responsibility & Sustainability  
Michelle Brown, Deputy Director & Head of SRS Programmes  
Michelle Christian, Director - Property & Residential Services  
Glen Cousquer, UCU Green rep  
Emma Crowther, Transport & Parking Manager  
Dean Drobot, Head of Utilities & Energy Management  
Grant Ferguson, Director of Estates Operations  
Kate Fitzpatrick, Waste & Recycling Manager  
Claire Graf, Joint Unions Liaison Committee representative  
David Jack, Energy & Utilities Operations Manager  
George Sked, Director of Procurement  
Rosheen Wallace, Students' Association VP Community  
Hugh Edmiston, Director of Corporate Services (ex officio)  
Gary Jebb, Director of Estates (ex officio)

**In attendance:** Sandra Kinnear, Health, Safety and Sustainability Advisor, ACE Property, for Michelle Christian  
Charlotte Lee-Woolf, SRS Business Development Executive, for item 3  
Lucy Stanfield, Business Development Analyst – Circular Economy, for item 3

**Apologies:** Michelle Christian; Kate Fitzpatrick; Claire Graf; David Jack; George Sked; Hugh Edmiston (ex-officio)

**1** The Group welcomed new member University and College Union (UCU) Green rep Glen Cousquer. **A**

The minute of the meeting held on 24 June 2019 was approved as a correct record, subject to one amendment: item 8 on SRS Reporting had been presented by the Student Engagement, Events & Reporting Programme Manager rather than the Head of SRS Programmes.

**2 Matters Arising**

There were no matters arising not covered elsewhere on the agenda.

**3 Proposal for a Circular Economy Innovation Centre** **B**

SSAG was briefed on an ongoing project to develop a business case for a Circular Economy Innovation Centre. Discussions between Zero Waste Scotland and the SRS Business Development Executive began 18 months ago, highlighting the need for a hub to bring together students, academics, business representatives and policy makers to exchange knowledge, develop skills, create solutions and help overcome barriers in the transition to a circular economy.

Five months in to the project an outline proposition had been drafted (summarised in the paper), in line with the current vision for the city region, and underpinned by the idea of a global centre of knowledge and innovation. The Centre would deliver a programme across five activity streams: research and innovation support; education and skills (including links to the new Circular Economy MSc); showcasing and problem-solving events; developing a network across the region and beyond; and policy engagement

within the region and nationally. The focus would be on areas of opportunity for innovation, such as construction, food and drink, hospitality and tourism, as well as several cross-cutting themes, such as procurement. As activities would be multi-agency, considerations of ownership would have to be on a case by case basis.

The hub, managed by a core team of half a dozen staff, would work closely with ECCL, and look for opportunities to use the UoE estate as a living lab. The business case would be completed by summer 2020 and the centre established soon afterwards. Following initial seed funding (in part from Zero Waste Scotland – the centre was not yet fully funded), it should be self-sustaining within five years. The centre would not be funded directly by UoE, only in kind through provision of space (for six desks, plus access to space for meetings and events). The hope was for the centre to be housed within the Edinburgh Futures Institute, and accommodated in the interim at Edinburgh Innovations.

Members were broadly supportive of the proposition, but urged the project team to be cautious and ensure that any commitments being made were deliverable. SSAG highlighted potential reputational issues if sustainability claims regarding the operations of the centre were not replicated across the wider University. The Group noted that there could be significant interest in the hub from the student body, particularly around opportunities for student-led social enterprise workshops, which were being discussed as part of the collaboration with the prospective MSc in Circular Economy.

Action – CLW to follow up on student opportunities with RW outwith the meeting.

#### **4 Responding to the Climate Emergency – Next Steps**

**C**

Since the Group last met there had been significant developments around climate change. Positive discussions had taken place at the University Executive Away Day on 13<sup>th</sup> June, resulting in a series of agreed actions which were now being implemented. UoE's Zero by 2040 target was reconfirmed, taking a mixed economy approach of managing down demand in terms of energy, heat, travel and so forth, while accepting that in the short-term it would not be possible to reach zero without some form of offsetting. There were a number of potential pathways available on energy and heat, though these would come at significant financial cost. The Travel and Aviation Working Group had been established to look into possible next steps on flights. The Travel Survey coming out in the next few weeks would be another opportunity to engage on the issue.

Action – EC to follow up with the SRS Communications Manager on the form of words to best convey the University's position on the climate emergency, as agreed with the Director of Communications & Marketing.

SSAG noted that the University of Stirling Students' Union had declared that they were now carbon neutral in their operations. While a number of UoE departments had expressed an interest in becoming carbon neutral, members recognised the importance of approaching this in the context of their wider School, College, or Support Group, to ensure efforts were corralled into a more impactful, strategic approach.

#### **5 The Government's Programme for Scotland 2019-20**

**D**

In the absence of the Climate Policy Manager, the Director of SRS briefed the group on the Programme for Scotland, released by the Scottish Government every September and setting out actions for the coming year. The latest version included a number of commitments on climate change, including: a 'Green New Deal' with the Scottish National Investment Bank to attract green finance to Scotland, alongside a green growth

accelerator for councils; investing in bus infrastructure and working towards net zero aviation; requirements for new commercial buildings to be net zero by 2024; and planning a £30M investment in renewable heat projects.

It was not yet clear how this would be achieved. While the Programme contained distinct opportunities for the University in terms of serving as a living lab on heat innovations and accessing funding, significant challenges remained. Decarbonisation of heat within UoE would not happen within that timescale, though decarbonisation of the fleet was feasible. SSAG recognised that it was important not to neglect the heat agenda in favour of the offsetting question. While there was research on heat within UoE, the real challenge was the practicality of how to apply this to the existing estate, in a cost-effective way. A coherent site strategy would be required, rather than a building-by-building approach. Scottish Water were exploring the same issue, looking at capturing heat from sewers. UOE would continue to engage with third parties on emerging technologies and keep abreast of discussions.

The Scottish Government was currently running a consultation focused on the role of public sector bodies in ending Scotland's contribution to climate change, aimed at establishing more strategic reporting, with each organisation declaring their target and how they planned to get there. SRS would continue to share briefings on areas relevant to the Group.

## **6 Sustainability & Festivals Project**

**E**

There had been growing awareness that UoE could be doing more to support sustainability at Edinburgh's Festivals in University venues. The Sustainability and Festivals Project was established early in 2019, following a short term internship. The project work streams were implemented by the SRS Project Coordinator: Sustainability and Festivals, supported and monitored by a Steering Group.

As the largest landlord of the Festival Fringe, the University was in a strong position to collaborate with tenants to ensure sustainability was further embedded in policy and practice. Over summer 2019 SRS hosted a sustainability hub with both an online and a physical presence. The project evaluation report would be available soon. Next steps included continuing to work with companies, tenants and University stakeholders to improve sustainability of the 2020 Festival Fringe; supporting opportunities for student learning and research and for student-led social enterprise (e.g. on eliminating single use cups); identifying new ways to improve Festival sustainability and developing a long term approach. Plans were underway to introduce a reusable cup scheme in University venues next year.

SSAG welcomed efforts to take a more structured approach to festival sustainability, enabling UoE to formalise and police activity in its spaces with tenants using its power, water and waste streams (as was already done for health and safety). There was also significant reputational impact. Members noted increasing focus on sustainable tourism, including current research focused on Barcelona. Lessons learned from festivals could be applied to University events more generally.

Action – DG to follow up with Janet Archer on funding.

Action – MB to follow up with Glen Cousquer on sustainable tourism.

Action – All members to share their festival sustainability ideas with Matthew Lawson.

## **7 Energy Quarterly Report**

**F**

The Head of Energy & Utilities Management updated the Group on issues and priorities relevant to utilities infrastructure and performance at Q1 2019/20. In terms of energy strategy, there had been an issue with metering, which was addressed through an extensive upgrade programme. KB in particular had had problems getting metering down to building level. Its capacity to report at this level had been greatly improved, though it would take some time for data to come through and accumulate to a point where it was actionable. UoE now had the capacity to enable building level metering of electricity and heat across the majority of its sites, which could then be used to link behaviours to buildings and better assess the outcome of energy engagement activities. The Energy & Utilities Team were providing a platform that could give detailed reporting outlining a building's performance throughout the year and allow comparisons across campuses, buildings, colleges and faculties. A customisable web-based display of renewable energy generation from PV was expected in the next few months.

Action – DD to provide an indication of timescales to completion as well as an overview of what that entailed, for December's meeting.

A similar exercise had been carried out tracking the efficiency of University data centres, which had found them to be performing well in terms of power usage effectiveness (PUE). More work was needed on how the University communicated its energy performance to stakeholders, and on how this compared with other institutions and with UoE's own historical performance. Estates would take advice from IS on how best to frame these communications.

The 2018/19 end of year utility expenditure was on target at 4% under budget. SSAG noted that it was currently worthwhile paying the offsetting charge in order to be carbon neutral, as this helped with research funding bids. A £20M pipeline of energy efficiency projects had been teed up, with plans for project delivery being reported to Estates Committee in March.

Estates were currently reviewing the final draft of the Energy Masterplan, looking for a cost effective pathway to deliver zero carbon heat and electricity by 2040. UoE would transition away from fossil fuel driven electricity generation, making investments in wider infrastructure and requiring an extensive refurbishment programme at building level to facilitate this. It had been an 8-month long process, working with external consultants Buro Happold who had carried out energy audits and costed various interventions, ranging from £50/m<sup>2</sup> to 500/m<sup>2</sup> for 'light' versus 'deep' retrofitting. Deep refurbishments in older buildings were estimated to achieve a 40-60% reduction in heat demand. Members welcomed the energy performance update and KPI reporting format.

## **8 SRS Programmes Quarterly Report**

**G**

SSAG noted an update on SRS Programmes 2018/19. Through August and September Programmes had its usual link in to Welcome Week, launching communications campaigns and the Sustainability Champions network. The SDGs in the curriculum mapping project was underway. Programmes were supporting the University's response to the climate emergency and, over the next few months, would be engaging on business travel, sustainability in the curriculum, and the Sustainability Awards, which offered a good vehicle to bring to life UoE's ambitious zero waste, zero carbon and SDG goals.

## **9 Waste, Reuse & Recycling Quarterly Report**

**H**

Members noted a summary of the University's waste performance within the academic and support estate during 1 August 2019 to 31 July 2019. With the number of occupants

in University buildings continuing to increase, the Waste Office managed multiple waste streams ensuring that UoE waste was diverted from landfill. SSAG could be confident in the figures provided, as the Waste Manager ensured disposal routes were audited, including physical checks. The new general waste contract began in April 2019, having been awarded to Biffa (the incumbent supplier).

Action – KF to provide a brief summary of how the University's waste was recycled and what this meant in practice.

SSAG found these reports helpful, noting a need to rethink communication with international students on waste. Members advised emphasising the University's zero waste targets at Open Days, engaging early with the student community on desired behaviours around waste.

Action – SK & KF to follow up outwith the meeting on the per capita figures for Pollock Halls.

Action – GC to follow up with KF on presenting on UoE waste systems, to give clarity on the issue.

## **10 Travel & Transport Quarterly Report**

The Travel & Transport Manager gave an overview of activities throughout 2018-19. A key focus had been provision of fair and equitable bus services between campuses. Peter Brett Associates were contracted to support the review, looking at bus operations, free shuttle bus provision, ticketing options, and how other institutions approached the issue. PBA recommended replacing the KB shuttle with a more equitable and environmentally friendly offer, diverting funding to support a discounted student Lothian Bus Ridacard, a low price student offer for the Just Eat cycle hire scheme, and improvement of the travel offer to Easter Bush. University Executive accepted the recommendations in May. As implementation from September 2019 was not feasible, the changes were deferred to September 2020.

The number of Just Eat cycle passes sold to date was relatively low and discussions were ongoing on how to improve communications around the scheme. Usage rates had changed dramatically, with 70% of all journeys in the city being carried out with the University pass. Figures were difficult to compare with the equivalent this time last year, as the scheme had just launched. The most popular routes were all between University sites, with Bristo Square consistently featuring in the top two. There were some challenges and concerns about the long term viability of the scheme, in the absence of Council funding, and with rates of vandalism increasing. Just Eat would produce a University-specific report. The UoE Travel Survey, carried out every two years, would be issued to all staff and students in late October, including opportunities to feed back on bus options and the Just Eat cycle scheme.

Action – MB to follow up with the SRS Communications Manager on promoting student travel deals.

More than half of Estates' fleet were now electric vehicles, with replacements been done as terms of existing vehicles came up. The focus was now on transitioning the wider University fleet, though the technology for larger vans was lacking. ACE were aiming to have an all-electric fleet by Christmas 2019.

Members welcomed the report, in particular measures to improve cycle safety, and felt that more progress was needed to improve cycle safety on access routes to Easter Bush.



**Sustainability Strategy Advisory Group (SSAG)**

**30 January, 2020**

**Annual SRS Report**

**Description of paper**

1. The purpose of this paper is to update committee members on the University's Social Responsibility and Sustainability Annual Report for 2018-19. There will also be a presentation of the new website.

**Action requested**

2. The SSAG is asked to note and discuss the paper.

**Recommendation**

3. The SSAG should note and discuss the paper and provide feedback to progress the publication of the Annual SRS Report and improve the reporting process.

**Background and context**

4. The University is committed to continually improve its approach to social responsibility and sustainability reporting, ensuring we report on those issues that are of most importance to our stakeholders and are transparent in the progress that we have made.
5. The scope of the University's reporting reflects the social responsibility and sustainability issues defined by the SRS Committee. These include climate change, sustainable estates, sustainable procurement, responsible investment, fair employer, community engagement, widening participation, research & public engagement, and learning & teaching.
6. We have supported the University's efforts to further align the Annual Report and Accounts to the International Integrated Reporting Framework. Social responsibility and sustainability issues have been reported through the Operational Review within the Annual Report and Accounts. This is the sixth year that we have reported progress on social responsibility and sustainability issues in this report.
7. Alongside the Annual Report and Accounts, the University continues to produce a more detailed standalone online report and a physical document supporting efforts to engage with our diverse range of stakeholders.

**Discussion**

8. Following recommendations to improve the accessibility and format of the online format, the Department for Social Responsibility and Sustainability have over the six months developed a new website to host the annual report. The new website

will make it easier for people to navigate and read the report, including on mobile phones and tablets.

9. The new website has been developed in accordance with advice from Communications and Marketing, and Information Services, ensuring the content is accessible to as wide an audience as possible (an accessibility statement will be included).
10. This year's report includes more in depth information on a range of SRS issues than previous years. Like last year, progress against the Sustainable Development Goals have been included, as well as against Key Performance Indicators that are University specific. Each section includes a progress in the last year against policies and targets, as well as case studies and information on future priorities and challenges.
11. For the first time, the final draft report will be sent to a group of external stakeholders to provide comment on the University's progress over the last year, as well as comment on the format of the report. These comments will be included in the final version of the report when it is published. This supports efforts towards transparency and holding the University to account.

### **Resource implications**

12. Resource to support the annual reporting process of social responsibility and sustainability issues is covered by existing resource from the Department for Social Responsibility and Sustainability. Input is required from key internal stakeholders to collate and provide information that is required for the annual report.

### **Risk management**

13. Key risks include ethical and reputational, both are associated with not having a clear strategic and transparent approach for the reporting on social responsibility and sustainability issues. To manage these risks, the University's approach to reporting is aligned with best practice and is annually re-evaluated.

### **Equality and Diversity**

14. A key aim of the report is to report the University's progress on equality and diversity issues.

### **Next steps/implications**

15. The final draft of the online report will be circulated to relevant internal and external stakeholders. A physical document will be developed to promote the highlights from the main report. Planning to improve the University's approach to reporting social responsibility and sustainability issues will be developed further this year.



**Consultation**

16. Key stakeholders have been consulted throughout this process, from the collation of the information to the analysis of the data included within the annual report.

**Further Information**

17. Author and presenter

Matthew Lawson

Student Engagement, Events and Reporting Manager

**Freedom of information**

18. Open paper.

**Sustainability Strategy Advisory Group (SSAG)****30 January, 2020****Scottish Government Public Bodies Duties Report 2018-19****Description of paper**

1. This paper provides brief analysis of and includes the final report for the University of Edinburgh for Scottish Government Public Bodies Climate Change Reporting. It is for noting.

**Action requested**

2. The SSAG is asked to note the report and provide any comments.

**Recommendation**

3. The SSAG should note the report's contents and progress made as well as challenges we still face.

**Background and context**

4. Since 2015/16, the University of Edinburgh and all other public bodies have reported climate change emissions to Scottish Government as part of public bodies duties under the Climate Change (Scotland) Act 2009 and to fulfil the [Climate Change \(Scotland\) Order 2015](#). Mandatory reporting has been considered an effective means to drive forward progress to tackle climate change mitigation and adaptation in the public sector. Deadline for FHE reports is set as 30 November each year. The University of Edinburgh completed the report using the government's online template and submitted by the deadline. The full report follows this brief analysis of the contents of the report, which focuses specifically on section 3.

**Discussion**

5. The PBD climate change reports are a combination of narrative sections and quantitative data sections. This brief analysis focuses on section 3, which collates all available University data for scope 1, 2 and 3 emissions. Key emissions sources are considered here, in comparison to previous years. The 2018/19 report is framed by the new University Strategy 2030, which notes the need to meet the zero by 2040 target and integrate the SDGs into university practice.

6. Totals reported to Scottish Government for scope 1, 2 and 3 emissions since 2016/17 are as follows in tCO<sub>2</sub>e:

	Scope 1	Scope 2	Scope 3	TOTAL
2016/17	35983	35155	34776	105914
2017/18	36223	28515	30251	94989
2018/19	38265	22020	31106	91391

Scope 3 includes business travel and staff and student commuting (the latter is not included in our targets or reported internally to GaSP but is required for Scottish Government reporting).

7. Scope 1, natural gas, continues to be a significant and rising source of carbon emissions for the University. The table shows consumption and emission factors behind tCo2e for 2016/17 to our most recent report for 2018/19, with only a slight decrease to emission factor during this time.

	2016/17	2017/18	2018/19
Natural gas consumption Kwh	191,107,122	193,046,455	204,781,696
Emission factor kg CO2e/Kwh	.1841639891	.18396	.18385
Total carbon tCO2e	35195.1	35512.8	37649.1

8. Significant drops in Scope 2 since 2016/17 can be attributed to emission factor and this year also to a decrease in grid electricity consumption, as apparent here:

	2016/17	2017/18	2018/19
Grid electricity consumption Kwh	99,996,087	100,733,772	86,149,598
Emission factor kg CO2e/Kwh	.35156	.28307	.2556
Total carbon tCO2e	35154.6	28514.7	22019.8

9. The key source of emissions in Scope 3 continues to be business travel, however further analysis is required across years after issues with robustness of Key Travel flights data and the internal system built to collate travel data, which may have caused inaccuracies in data for 2016/17 (some flights counted twice). Flights continue to be the main source of emissions. Emission factors for long haul flights have increased since 2016/17 while the emission factor for domestic flights has slight decreased in 2018/19. It is difficult to see trends across specific reported categories due to flights being categorised differently each year depending on Key Travel and e-expenses data available.

	2016/17	2017/18	2018/19
Business travel TOTALS	17391	14617	17803
Air travel totals	16489	13789	16936

### Resource implications

7. PBD reporting to Scottish Government is undertaken through collaboration across SRS, Estates, Procurement and other relevant departments in the University. Resource implications arise when considering the further need to address our emissions from Scopes 1, 2 and business travel in Scope 3, to meet our Zero by 2040 target.

### Risk Management

8. Risks to not submitting by deadline are legal and reputational. Risks to not addressing areas of rising emissions, or emissions that are not decreasing

significantly, include missing the Zero by 2040 target and the ethical and reputational ramifications of this.

### **Equality & Diversity**

9. The Climate Change Strategy, Zero by 2040, acknowledges that climate change effects are not equally distributed across urban and world populations, and this is reflected in the report in narrative sections that present the University's whole institution approach to climate change. The PBD climate change reporting is meant to ensure that the public sector is striving to make a fair and necessary contribution to climate change mitigation and adaptation in Scotland, with impact on the rest of the world.

### **Next steps/implications**

10. Next steps include further analysis of past reporting and projections to 2040. This analysis is underway and SRS has employed a part-time PhD intern to assist in use of tools for projections as well as scoping the university sector in terms of targets and methods used to forecast and define actions to meet targets. The internship is part of a two year SRS carbon reporting project to refine reporting with particular focus on Scope 3, for instance to better understand our emissions from international student travel and procurement for instance (this supported by a student consultancy project and a small project led by Ecometrica). We will also be developing an understanding of handprinting and how to present positive impact within a whole institution approach. Progress in these areas will be captured in future reporting to Scottish Government, which is in the process of revising the information they require and the platform used to collate data.

### **Consultation**

11. PBD climate change reporting is carried out through collaboration and a close relationship with Ecometrica, which host the internal platform we use to collate data before submitting to Scottish Government. This is always a consultative and cooperative process.

### **Further information**

#### **12. Author**

Elizabeth Vander Meer  
SRS

#### **Presenter**

Dave Gorman  
SRS

### **Freedom of Information**

13. This is an open paper.

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**Required**

**PART 1: PROFILE OF REPORTING BODY**

**PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY**

**PART 3: EMISSIONS, TARGETS AND PROJECTS**

**PART 4: ADAPTATION**

**PART 5: PROCUREMENT**

**PART 6: VALIDATION AND DECLARATION**

**Recommended Reporting: Reporting on Wider Influence**

**RECOMMENDED – WIDER INFLUENCE**

**OTHER NOTABLE REPORTABLE ACTIVITY**

**PART 1: PROFILE OF REPORTING BODY****1(a) Name of reporting body**

University of Edinburgh

**1(b) Type of body**

Educational Institutions

**1(c) Highest number of full-time equivalent staff in the body during the report year**

10964

**1(d) Metrics used by the body**

Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.

Metric	Unit	Value	Comments
Floor area	m2	930000	
Number of full-time equivalent students	number FTES	43380	

**1(e) Overall budget of the body**

Specify approximate £/annum for the report year.

Budget	Budget Comments
1102000000	

**1(f) Report year**

Specify the report year.

Report Year	Report Year Comments
Academic	

**1(g) Context**

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

As a truly global university, Edinburgh aims to make a significant sustainable and socially responsible contribution to the world. The University's new Strategy 2030 has the Sustainable Development Goals embedded in whole organisation reporting of University impact. It notes that the University will not grow for growth's sake, and the vision includes being on track to be a zero carbon University by 2040.

The University enables impact through research, graduating students equipped to address global challenges. University researchers increasingly focus on global challenges, conducting research with impact that feeds into climate change mitigation and adaptation approaches. The University is also a leader in learning and teaching in the area of climate change, with undergraduate offerings as well as postgraduate courses. Student involvement and the student experience will continue to be integral to the success of climate action; we have expanded student living lab opportunities in this space significantly. University campuses in Edinburgh generate emissions from their operations, and the "Zero by 2040" Climate Change Strategy 2016-26, launched at the end of 2016, addresses both the need for research and teaching in climate change as well as reducing operational emissions, and investing responsibly. A climate change adaptation framework has been approved and launched and a related biodiversity is drafted and being finalised, providing steers for institutional action. The University is embedded in the city of Edinburgh and makes contributions through local partnerships with the city council and other community organisations on climate change issues. We are also engaging with European and other universities internationally for learning and exchange on addressing climate change and more widely on sustainability issues.

**PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY****2(a) How is climate change governed in the body?**

Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements.

The Social Responsibility and Sustainability Committee (SRSC) provides climate change governance for the University and will review and monitor the Climate Change Strategy 2016-26 on behalf of the Senior Leadership Team (SLT) and University Executive (UE). A mid-term review will be conducted in 2021 to gauge progress against the strategy and assert any new measures needed to meet proposed targets. Reviews will lead to continual assessment of both targets and means to achieve these targets. Further information on the Climate Strategy 2016-26 is available online at [www.ed.ac.uk/about/sustainability/themes/climate-change/climate-strategy](http://www.ed.ac.uk/about/sustainability/themes/climate-change/climate-strategy).

The Sustainable Operations Advisory Group (SOAG) was replaced by the Sustainability Strategy Advisory Group (SSAG) from October 2017. The new group sets strategic direction for sustainability issues and provides advice and a performance review function. The Utilities Working Group provides screening for Sustainable Campus Fund projects and a forum for discussion on energy related carbon mitigation. The Department for Social Responsibility and Sustainability (SRS) functionally leads on climate change. Estates functionally leads on sustainable operations such as biodiversity, energy management, landscape management, travel and waste, with support from SRS. Accommodation Services functionally lead on food.

A new academic lead for Climate Responsibility and Sustainability has been appointed this year (2019) to provide the University Executive with a holistic view of what the University is doing across its research, teaching and operations. The lead is meant to join up work on climate responsibility and sustainability across the University and present it to senior University staff, so the decisions they make are informed by this work and so that the University continues to progress on this issue.

**2(b) How is climate change action managed and embedded by the body?**

Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, departmental heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body (JPEG, PNG, PDF, DOC)

The University is a founding member of the Universities and Colleges Climate Commitment for Scotland and our ambitious Climate Action Plan was reviewed and replaced by the Zero by 2040 Climate Change Strategy 2016-26. The University has had a Climate Action Plan since 2010 and the plan set out an institution-wide approach to addressing climate change. The new Strategy launched a whole institution approach which embeds the living lab approach and focuses on research, learning and teaching, operations, adaptation and investments. It includes emphasis on organisational alignment on climate strategy priorities across existing strategies and policies in recycling and waste management, transport, procurement and food.

The University's new Strategy 2030 has been launched in 2019. The focus of Social and Civic Responsibility includes climate change and sustainability: We can make a difference to individuals and communities in a number of ways; from tackling climate change, global justice and water safety to sustainable food production, information security and the impacts of rare diseases; the United Nations Sustainable Development Goals provide a meaningful and comprehensive manifesto to which we will contribute. The Teaching and Learning focus importantly asserts the following: We will not grow for growth's sake. We will improve our student experience while aiming to keep our undergraduate community at a stable size. In reshaping our teaching for the future, we expect to expand interdisciplinary and multidisciplinary, postgraduate and digital education.

The vision for 2030 presents the following demonstrations of success:

- We will be on track to be a Carbon-Zero University by 2040.
- We will see integrated reporting of our whole organisational impact against the United Nations Sustainable Development Goals.
- Our estate will be fit for purpose, sustainable and accessible.

The importance of social responsibility as a strategic priority was recognised through the establishment of the Department for Social Responsibility and Sustainability (SRS) in 2013. SRS has led coordination and development of the new climate strategy and has led on high quality and impactful programmes that continue to catalyse action and collaboration across campus and support the University in its Social Responsibility and Sustainability Strategy. Priority programme areas include: energy engagement and communications; resource efficiency; sustainable laboratories; as well as fair trade and sustainable procurement. Throughout our programmes we develop the living lab approach across campus to link research and learning opportunities to practical operational issues. The efforts of staff and students in making a positive contribution towards society and the environment continues to be recognised through the Sustainability Awards.

In January 2013 the University took a significant step forward in linking its sustainability and investment strategies, and exercised leadership amongst Higher Education Institutions through its adoption of United Nations Principles of Responsible Investment (UNPRI). In February 2016 the University adopted a new Responsible Investment Policy Statement. This statement summarises the approach the University takes to responsible investing, and highlights the progress made along with actions planned in response to policy decisions and strategic objectives relating to environmental, social and governance considerations. As part of Zero by 2040, the University announced in October 2017 a shift of £60M into sustainability and low carbon companies. Two funds are being established, with one investing in companies tackling a wide-range of sustainability issues while the second fund will invest exclusively in renewable technology to support the global transition to low carbon energy systems. The University has invested more than £150 million in low carbon technology, climate-related research and businesses that directly benefit the environment since 2010. In 2016, the University divested from three major coal companies. And most recently in 2018, the University committed to transitioning away from investments in fossil fuels by the start of 2021. The role of the Investment Committee is to consider the corporate governance and other related implications of the University's investments. The Terms of Reference for the Committee along with fund analysis and reports are available on the University website at the following link:<http://tinyurl.com/hsxpklm>. The objective of the University Endowment and Investment fund is to grow the value of the fund and maintain the capital in real terms over the long term whilst providing an annual income yield to support the activities of the numerous endowments. The Investment Committee meets quarterly to review the performance of the appointed fund managers and to consider and implement policy developments and proposals from the University. its remit was amended in 2018/19 to include specific reference to sustainability objectives.

**2(c) Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?**

Provide a brief summary of objectives if they exist.

Objective	Doc Name	Doc Link
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<p>The University Strategy 2030 replaces the former University of Edinburgh Strategic Plan 2012-2016 which noted the following: The University aims to make a significant sustainable and socially responsible contribution to the world; The Strategic plan enables the University to make an impact through research, graduating students equipped to address global challenges such as climate change, and through sustainable operations; The University will build sustainability into planning processes, ensuring that the new and refurbished estate is energy efficient and meets waste and carbon standards throughout their lifetimes; The University embeds social responsibility and sustainability in the student experience through courses and through the University culture, practices and provision of student-facing services; The University will create new interdisciplinary institutes and centres to address today's great challenges, including low carbon technologies; The University will improve the local environment, ensuring sustainability and accessibility are built into estates, energy and transport policies and practice.</p> <p>The new Strategy 2030 has the Sustainable Development Goals embedded in whole organisation reporting of University impact. It notes that the University will not grow for growth's sake, and the vision includes being on track to be a Carbon-Zero University by 2040.</p>	<p>Strategy 2030</p>	<p><a href="https://www.ed.ac.uk/files/atoms/files/strategy-2030.pdf">https://www.ed.ac.uk/files/atoms/files/strategy-2030.pdf</a></p>
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**2(d) Does the body have a climate change plan or strategy?**

If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.

The University of Edinburgh launched the Zero by 2040 Climate Change Strategy 2016-26 in November 2016. The Strategy is available online, along with previous Climate Action Plans at <https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040>. SRS in collaboration with Estates has launched a new adaptation framework for the University in Spring 2019, and has finalised a draft of a linked biodiversity strategy, both to align with the wider Climate Change Strategy.

**2(e) Does the body have any plans or strategies covering the following areas that include climate change?**

Provide the name of any such document and the timeframe covered.

Topic area	Name of document	Link	Time period covered	Comments
Adaptation	Adaptation Framework	The Framework was approved in winter 2018 and launched in May 2019.	The Framework will cover a five year period.	
Business travel	Business Travel report and pilots	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/travel/business-travel-outside-edinburgh">https://www.ed.ac.uk/about/sustainability/what-we-do/travel/business-travel-outside-edinburgh</a>		Recognising the importance of addressing our emissions from business travel, the University has created an interactive platform to make visible the emissions implications of travel by school and department within the University. Along with this platform, the University is undertaking a sustainable business travel pilot in up to six schools and support groups to trial different methods to bring down emissions.
Staff Travel	Integrated Transport Plan 2017-21	<a href="https://www.ed.ac.uk/files/atoms/files/integratedtransportplan.pdf">https://www.ed.ac.uk/files/atoms/files/integratedtransportplan.pdf</a>	2017-2021	The Integrated Transport Plan sets out how The University of Edinburgh will achieve its vision that by 2021 our students, staff and visitors will be able to access our Estate by the mode of transport best suited to their needs.



Energy efficiency	Climate Change Strategy 2016-26, Zero by 2040 Energy Strategy under development 2018/2019	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	Zero by 2040 includes the development of new bespoke sustainable design standards for the University for energy efficiency (etc), and these are currently being trialled on campuses.
Fleet transport	Integrated Transport Plan 2017-21	<a href="https://www.ed.ac.uk/files/atoms/files/integratedtransportplan.pdf">https://www.ed.ac.uk/files/atoms/files/integratedtransportplan.pdf</a>	2017-2021	The Integrated Transport Plan includes a target to increase the proportion of vehicles in the fleet that are electric.
Information and communication technology	Climate Change Strategy 2016-26, Zero by 2040	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	A Sustainable ICT Task Group is progressing aspects of this strategy, including determining the footprint of ICT on our campuses.
Renewable energy	Climate Change Strategy 2016-26, Zero by 2040	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	The Renewables and Low Carbon Options (RELCO) group delivered recommendations in Winter 2017 and investment in solar PV has, with funding from the Scottish Funding Council (SFC), resulted in initiation of £3.2M in solar projects on campuses.
Sustainable/renewable heat	Climate Change Strategy 2016-26, Zero by 2040	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	The University is investing in ground, water and air source heat pump technology where appropriate in its estates operations and development activities. The University worked
Waste management	Waste Strategy 2018/19 - 2022/23 and Waste Strategy Implementation Plan	<a href="https://www.ed.ac.uk/files/atoms/files/waste_strategy.pdf">https://www.ed.ac.uk/files/atoms/files/waste_strategy.pdf</a>	2018/19-2022/23	The Waste Strategy 2018/19-2022/23 was published at the end of 2018 - it sets out a zero waste vision, embedding circular economy thinking in University processes. The Strategy provides direction for the University to manage its material resources more effectively by thinking of waste as resource, with the aim of achieving increased efficiency, cost savings, lower environmental impact and positive carbon reductions. Along with percentage targets, the strategy sets out the following: Sustainable procurement - Support improvement and innovation in supply chain waste to contribute to Scottish and global circular economy ambitions. Sustainable estates development - Promote resource efficiency via the effective management and reduction of construction waste with targets specified, monitored and reported in site specific management plans.
Water and sewerage	Climate Change Strategy 2016-26, Zero by 2040	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	The University has invested in water saving and efficient technologies through its Sustainable Campus activities in laboratories. Where permitted the University has implemented Sustainable Urban Drainage Systems in its new building development process. It is engaging actively with Scottish Water to plan and coordinate the effect of its ambitious development strategy on the water supply, sewerage and drainage infrastructure.
Land Use	Climate Change Strategy 2016-26	<a href="https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040">https://www.ed.ac.uk/about/sustainability/what-we-do/climate-change/initiatives/zero-by-2040</a>	2016-2026	The Climate Change Strategy includes emphasis on sustainable building design, which has implications for land use (the contexts of buildings) - the adaptation framework and biodiversity strategy both support expansion of quality green spaces on campuses.
Other (state topic area covered in comments)				

## 2(f) What are the body's top 5 priorities for climate change governance, management and strategy for the year ahead?

Provide a brief summary of the body's areas and activities of focus for the year ahead.

The Zero by 2040 Climate Change Strategy for the University of Edinburgh sets out areas of action, which we continue to progress.

Five priorities for the coming year fall into the Strategy's key strands of:

- Research, learning and teaching and living lab
- Reducing our operational emissions - Leveraging investments
- Adaptation and biodiversity
- Continuing to develop partnerships

The University will continue to promote research to encourage wider public understanding of the challenges and solutions of climate change, and ensure that all students have the opportunity to understand how their area of study will be impacted by climate change. Be Sustainable, a free online course, provides staff and students with information on sustainability and ways to contribute to University progress in areas such as energy, resource efficiency, travel, food and labs, as part of SRS Learning and Development (<https://www.ed.ac.uk/about/sustainability/about/programmes/be-sustainable-training>). Be Sustainable is used to date by 605 staff and students. The University piloted a new student engagement initiative 'Student Pathways' in 2018-19., which supported students to develop knowledge and transferable skills around climate leadership and the Sustainable Development Goals. A total of 57 students participated and completed this initiative, receiving recognition through their Higher Education Achievement Record. The Student Pathways have been refined and launched in September 2019 for this academic year. The University launched a new Sustainability Champions Network in August 2019, bringing together staff and students who are interested in learning how to live and work in a more sustainable way. Close to 400 staff and students have signed up so far.

Equally, living lab projects in the climate mitigation and adaptation spaces are being encouraged and further expanded. We were a key partner in the European Students Sustainability Auditing Project, a three year project funded by Erasmus + which aims to better understand how universities are addressing social responsibility issues such as climate change. Students were trained as auditors and completed one week audits of participating institutions; other partners included Kaunas University of Technology and the University of Porto (further information available online [www.essaproject.eu](http://www.essaproject.eu)) The University has supported establishment of the Low Carbon College with Shanghai Jiao Tong University, extending its influence and impact through teaching and international research ([www.ed.ac.uk/news/2018/china-launches-first-low-carbon-college-with-exper](http://www.ed.ac.uk/news/2018/china-launches-first-low-carbon-college-with-exper)).

Programmes to reduce operational emissions target electricity, gas and travel, key drivers of University emissions. Programmes that will continue to be prioritised include the energy reduction engagement programme and Sustainable Campus Fund, Sustainable Labs as well as renewables projects funded through the Scottish Funding Council. Approaches to reduce business travel emissions were trialled during 2018/19. Successful programmes such as the Sustainability Awards (a large-scale engagement programme focused on encouraging positive behaviours in laboratories, offices and student residences) will continue. Projects are underway to reimagine University approaches to carbon performance in IT and building design, having the potential to deliver significant savings and emissions reductions; sustainable design guidelines are currently in the trial phase, with the aim for roll out in 2019/20. A programme to improve metering is underway to ensure that the University has a better understanding of operational emissions.

Investments in renewable energy (solar PV) are being undertaken, and direct carbon offsetting through different carbon sequestration approaches (reforestation, peatland restoration) is still under consideration. Research investment in climate change continues, focused for instance on identifying the threats climate change poses, particularly to some of the world's most vulnerable communities, and developing innovative technologies to help mitigate these threats. The University committed to divest from coal and tar sands in 2015 and now had committed to fully divesting from fossil fuels by the start of 2021. Alongside divestment, the University announced at the end of 2017 endowment investment of £60M in businesses innovating in low carbon and sustainable technologies. Development of a formalised adaptation framework and a renewed biodiversity policy and strategy ensure progress in these areas, making visible what the University already undertakes in these areas and also extending actions for the benefit of staff, students and a wider community including biodiversity within the city of Edinburgh.

We continue to develop partnerships at local, national and international levels for capacity building, knowledge exchange and cooperative action on climate change; we engage with and have been approached by universities in Belgium, Denmark, Finland, Germany, Netherlands, as well as Canada, Chile, China and the United States, to name a few.

In summer 2019, the University senior leaders considered the climate emergency and the sustainable development goals at a 3 hour planning session with a substantial follow up paper agreed at University Executive in August 2019. The Court, The University's governing body, also held a 3 hour session on the climate emergency and sustainable development goals in September 2019. Substantial further policy and programmes are under consideration for 2020 and beyond.

**2(g) Has the body used the Climate Change Assessment Tool (a) or equivalent tool to self-assess its capability / performance?**

If yes, please provide details of the key findings and resultant action taken.

Yes, the Climate Change Assessment Tool was used as part of the review of the Climate Action Plan in summer 2015. A group of key internal stakeholders completed the self-assessment in a workshop setting, and the outcomes reinforced the need to develop a new strategy.

**2(h) Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

The University of Edinburgh follows and provides an example of best practice with the whole institution approach of the Zero by 2040 Climate Change Strategy. In 2019, the University issued a statement regarding the climate emergency and its commitment to meet challenges relating to this crisis situation; the statement can be found here -

<https://www.ed.ac.uk/news/2019/our-response-to-the-climate-crisis>

The University received the Sustainability Institution of the Year Green Gown Award 2018 and was highly commended as Outstanding Leadership Team in 2018 as well. We also signed the Sustainable Development Goals accord; through research, learning and teaching, operations and community of staff, students and alumni, the University is committed to delivering these Goals with partners, including the Students' Association, both locally and globally (<https://www.ed.ac.uk/about/sustainability/news/sdg-accord>). The Zero by 2040 strategy has built on successful existing strategies and has launched new programmes to address areas where we see our highest emissions such as energy and business travel, as well as being in the process of launching an adaptation framework. The University also leverages its investments considering climate change.

#### Energy:

The University has invested a total of approximately £30M on low carbon Combined Heat and Power (CHP), with the latest expansion at Easter Bush campus. CHP resulted in initial savings for the University of about 8,500 tonnes CO<sub>2</sub> per year; CHP can be adapted and need not run on gas, providing potential infrastructure for future zero carbon opportunities. The Sustainable Campus Fund has saved the University on average c 1327 tCO<sub>2</sub>e per year and £370,000. Our energy engagement and communication campaigns, through the Switch winter shutdown campaign, active energy coordinators and sustainable labs programme, are also resulting in estimated savings of approximately 553 tCO<sub>2</sub>e per annum. The Centre for Business and Climate Change at the University's Business school is developing a tool that addresses key carbon management challenges throughout the construction supply chain. <https://cbcc.business-school.ed.ac.uk/impact-and-collaboration/carbon-infrastructure-transformation-tool/> The living lab project, Enhance, aims to better understand and reduce energy demand in public sector buildings. <http://www.enhance-project.org/>

#### Transport:

A number of sustainable travel projects were delivered in 2018-19, having successfully applied for £57k of external funding and securing a fully funded Campus Cycling Officer through Cycling Scotland. Significant progress was made on student bus travel, with the University Executive supporting a recommendation to remove the shuttle bus service and secure a cheaper Student Ridacard for all. Further details are provided under Section 3K.

#### Business travel:

As a growing source of Scope 3 emissions, business travel presents a key challenge. SRS built an automated tool in 2017 to better capture data on business travel which has been highly successful and can be seen as an exemplar. In hand with the tool, SRS is considering trials of different methods to tackle emissions. The University created and leads on the Roundtable of Sustainable Academic Travel, a network of over 55 global institutions working to address business travel emissions within their institutions.

#### Food Policy:

In 2016 the University adopted a Good Food Policy to set out the University's commitment to supporting food systems that are environmentally, socially and economically sustainable. Our commitments are structured into five themes: sourcing, provision, practice, research learning & teaching and leadership & culture. The Department for Social Responsibility and Sustainability (SRS), the Department for Accommodation, Catering and Events (ACE) and the Procurement Office work together to put the policy into practice and identify areas for further improvement.

Central to our policy is our vision of a responsible catering service that succeeds in providing healthy, sustainable and affordable food to our customers. Since 2016 we have made significant progress in several areas including improving access to drinking water on campus, encouraging reusable containers, assessing sustainability risks in food supply chains, providing cookery classes to students and ensured more vegetarian and plant-based catering options on campus. Specific progress in 2018/19 included:

" Introducing a 25p levy on single use coffee cups in all cafés and food outlets, leading to a 37% reduction in disposable coffee cup purchases in the first year. This has now risen to 30p.

" 150 students attended our Cook School at Pollock Halls, run by University chefs.

" The University adopted a Palm Oil Policy setting out our commitment to buy certified sustainable palm oil.

" The University maintained its 2 star award from the Sustainable Restaurant Association

" We began sending coffee grounds from University cafes to be recycled into compost, which is then used by our Landscape team.

" We increased the proportion of plant based and vegetarian options on offer. By July 2020, 50% of options in every outlet will be plant-based or vegetarian.

#### Carbon reporting:

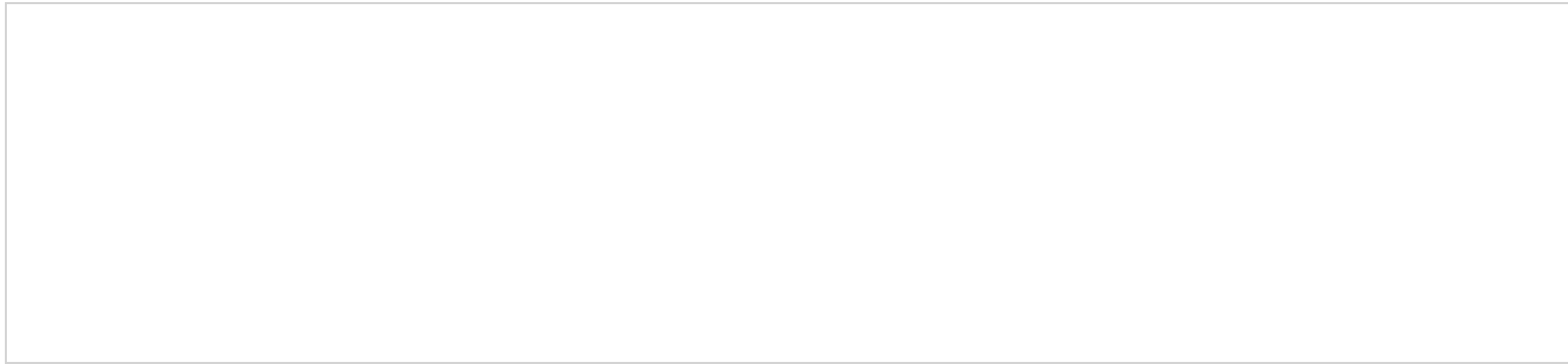
The University, as part of its commitments in the Climate Change strategy, is undertaking a two year carbon reporting project to scope best practice in the sector particularly in terms of Scope 3 reporting. This project also aims to refine and expand on reporting capabilities for Scope 3 emissions, for instance for staff and student commuting, procurement and international students. Along with better understanding our carbon footprint in terms of emissions from these sources, we will be gaining a better understanding of our carbon handprint. The University will also be considering available forecasting tools and which one(s) might be best to apply in our specific context.

#### Adaptation and biodiversity:

The new Adaptation Framework for the University describes a whole institution approach that can result in a more resilient, "climate ready" biodiverse estate and acknowledges embeddedness in the city of Edinburgh; it was approved by the end of 2018 and launched in May 2019. The Framework was developed through the involvement of the University community, including academics, students and support groups, and with support from Adaptation Scotland. It considers priority actions in research learning and teaching, operations and landscaping, carbon reduction investment, partnership working and communications. It is closely linked to a biodiversity sub-strategy and policy that will launch by the end of 2019. The Framework has fed into the EAUC through their Adaptation Task Group, as have student living lab project outputs that informed development of the framework.

#### Investments:

The University has already invested more than £50 million over the last seven years to fund world-class academics working in climate science, emissions reduction and sustainable technology. And as noted, at the end of 2017, the University announced an endowment investment of £60M in businesses innovating in low carbon and sustainable technologies. At the same time, Edinburgh will divest completely from fossil fuels by the start of 2021.



**PART 3: EMISSIONS, TARGETS AND PROJECTS****3a Emissions from start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year**

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint /management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1 & 2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b)). If data is not available for any year from the start of the year which is used as a baseline to the end of the report year, provide an explanation in the comments column.

(a) No information is required on the effect of the body on emissions which are not from its estate and operations.

Reference Year	Year	Scope1	Scope2	Scope3	Total	Units	Comments
Baseline carbon footprint	2007/08	38978	38836	13761	91575	tCO2e	The total includes business travel (estimate from back-fill calculation) and staff & student commuting (from travel survey 2007).
Year 1 carbon footprint	2008/09	39742	34281	13640	87663	tCO2e	The total includes business travel (estimate from back-fill calculation) and staff & student commuting (from travel survey 2007).
Year 2 carbon footprint	2009/10	45058	37543	20496	103097	tCO2e	The total includes business travel (estimate from back-fill calculation) and staff & student commuting (from travel survey 2010). The carbon emissions from staff and student commuting had significantly increased since the travel survey in 2007.
Year 3 carbon footprint	2010/11	45507	42877	20340	108724	tCO2e	The total includes business travel (estimate from back-fill calculation) and staff & student commuting (from travel survey 2010).
Year 4 carbon footprint	2011/12	39661	47212	20303	107176	tCO2e	The total includes business travel (estimate from back-fill calculation) and staff & student commuting (from travel survey 2010).
Year 5 carbon footprint	2012/13	36452	53132	19087	108671	tCO2e	The total includes business travel (8544 tCO2e) and staff & student commuting (from travel survey 2013).
Year 6 carbon footprint	2013/14	39204	49791	20528	109523	tCO2e	The total includes business travel (10048 tCO2e) and staff & student commuting (from travel survey 2013).
Year 7 carbon footprint	2014/15	41572	43306	22140	107018	tCO2e	The total includes business travel (11909 tCO2e) and staff & student commuting (from travel survey 2013).
Year 8 carbon footprint	2015/16	37544	36513	29726	103783	tCO2e	The previous report had an error in the breakdown of Scopes 2 and 3 - these corrected figures derive from our externally verified Carbon Guru report for 2015/16. This year also includes business travel (12293 tCO2e) and staff & student commuting (from travel survey 2016).
Year 9 carbon footprint	2016/17	35983	35155	34776	105914	tCO2e	A correction was made to waste data after we submitted to Scottish Government amounting to an addition of 103 tCO2e, which changes the scope 3 from 34673 to 34776. The increase is attributable to CHP being down as well as a significant rise in business travel, which we are able to capture in greater detail, using Carbon Guru reporting. The total includes business travel (17381 tCO2e) and staff & student commuting (from travel survey 2016).
Year 10 carbon footprint	2017/18	36223	28515	30251	94989	tCO2e	The total includes revised business travel figure (14618 tCO2e) and staff & student commuting (from travel survey 2018). Any small difference between our total from Carbon Guru and the Scottish Government total below is primarily due to differences in rounding of numbers.
Year 11 carbon footprint	2018/19	38265	22020	31106	91391	tCO2e	The total includes business travel (1803 tCO2e) and staff and student commuting (from travel survey 2018). Any small difference between our total for our Ecometrica platform and the Scottish Government total is primarily due to differences in rounding of numbers.

**3b Breakdown of emission sources**



Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If, for any such category of emission source, it is not possible to provide a simple emission factor(a) leave the field for the emission factor blank and provide the total emissions for that category of emission source in the 'Emissions' column.									
Total	Comments – reason for difference between Q3a & 3b.	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO2e)	Comments
91398.6		Natural Gas	Scope 1	204781696	kWh	0.18385	kg CO2e/kWh	37649.1	
		Fuel Oil	Scope 1	150000	kWh	0.26782	kg CO2e/kWh	40.2	
		Diesel (average biofuel blend)	Scope 1	68915	litres	2.59411	kg CO2e/litre	178.8	
		Gas Oil	Scope 1	30659	litres	2.75821	kg CO2e/litre	84.6	
		Petrol (average biofuel blend)	Scope 1	6698	litres	2.20904	kg CO2e/litre	14.8	
		LPG	Scope 1	150000	kWh	0.21447	kg CO2e/kWh	32.2	
		HFC-134a	Scope 1	63	kg	1430	kg CO2e/kg	90.1	
		R404a	Scope 1	9	kg	3922	kg CO2e/kg	35.3	
		R407C	Scope 1	7.40	kg	1774	kg CO2e/kg	13.1	Includes R407f emissions at .03 kg
		R410A	Scope 1	26.5	kg	2088	kg CO2e/kg	55.3	
		Other	Scope 1	69.8	tonnes	1000	kg CO2e/tonne	69.8	Other fugitive emissions - 69.8 tCO2e
		Grid Electricity (generation)	Scope 2	86149598	kWh	0.2556	kg CO2e/kWh	22019.8	
		Gas Oil	Scope 3	14084	litres	2.75821	kg CO2e/litre	38.9	Contractor vehicles

Water - Supply	Scope 3	573025	m3	0.344	kg CO2e/m3	197.1	
Water - Treatment	Scope 3	499685	m3	0.708	kg CO2e/m3	353.8	
Long-haul flights (average passenger)	Scope 3	443752	passenger km	0.19562	kg CO2e/passenger km	86.8	
Long-haul flights (Business class)	Scope 3	5173839	passenger km	0.43446	kg CO2e/passenger km	2247.8	
Long-haul flights (Economy Class)	Scope 3	62410978	passenger km	0.14981	kg CO2e/passenger km	9349.8	This apparent large jump in long-haul flights this reporting year reflects better data, as more flights can be identified more specifically as economy rather than long-haul average passenger (so the total for long-haul average appears smaller).
Long-haul flights (First class)	Scope 3	162377	passenger km	0.59925	kg CO2e/passenger km	97.3	
Long-haul flights (Premium economy class)	Scope 3	3561792	passenger km	0.2397	kg CO2e/passenger km	853.8	
Short-haul flights (average passenger)	Scope 3	1468848	passenger km	0.15832	kg CO2e/passenger km	232.6	
Short-haul flights (Business class)	Scope 3	367395	passenger km	0.2336	kg CO2e/passenger km	85.8	
Short-haul flights (Economy class)	Scope 3	14739665	passenger km	0.15573	kg CO2e/passenger km	2295.4	
Domestic flight (average passenger)	Scope 3	6617372	passenger km	0.25493	kg CO2e/passenger km	1687.0	
Coach	Scope 3	42604	passenger km	0.02779	kg CO2e/passenger km	1.2	
Bus (local bus, not London)	Scope 3	629813	passenger km	0.12076	kg CO2e/passenger km	76.1	
Car - petrol (average)	Scope 3	1600768	km	0.18084	kg CO2e/km	289.5	
Rail (National rail)	Scope 3	9711246	passenger km	0.04115	kg CO2e/passenger km	399.6	
Rail (International rail)	Scope 3	17621	passenger km	0.00597	kg CO2e/passenger km	0.1	

Taxi (black cab)	Scope 3	509294	passenger km	0.21176	kg CO2e/passenger km	107.9	
Organic Food & Drink Composting	Scope 3	451	tonnes	10.2039	kg CO2e/tonne	4.6	
Organic Garden Waste Composting	Scope 3	506	tonnes	10.2039	kg CO2e/tonne	5.2	
Refuse Municipal /Commercial /Industrial to Combustion	Scope 3	1139	tonnes	21.3538	kg CO2e/tonne	24.3	
Refuse Commercial & Industrial to Landfill	Scope 3	1334	tonnes	99.7592	kg CO2e/tonne	133.1	This is waste from University Accommodation that is landfilled by the Council
Other	Scope 3	4.46	tonnes	1000	kg CO2e/tonne	4.5	4.46 total tCO2e - 4.1 tonnes hazardous closed loop recycling (mixed commercial/industrial waste); 205 tonnes combusted waste (energy recovery, mixed commercial/industrial)
Plastics (Average) Recycling	Scope 3	2.88	tonnes	21.3538	kg CO2e/tonne	0.1	Closed loop
Paper & Board (Mixed) Recycling	Scope 3	93.05	tonnes	21.3538	kg CO2e/tonne	2.0	Includes books at 6.85, cardboard at 1.3 and mixed paper and board at 62.1, and wood at 22.8
Glass Recycling	Scope 3	135	tonnes	21.3538	kg CO2e/tonne	2.9	
Mixed recycling	Scope 3	1728	tonnes	21.354	kg CO2e/tonne	36.9	Closed loop recycling - mixed commercial and industrial waste
Metal Cans (Mixed) & Metal Scrap Recycling	Scope 3	7.36	tonnes	21.3538	kg CO2e/tonne	0.2	
WEEE (Mixed) Recycling	Scope 3	2.16	tonnes	21.3538	kg CO2e/tonne	0.1	Includes mixed and small
Construction (Average) Recycling	Scope 3	133	tonnes	1.37	kg CO2e/tonne	0.2	
Plastics (Average) Recycling	Scope 3	3.24	tonnes	21.3538	kg CO2e/tonne	0.1	Open loop recycling - average plastics
Other	Scope 3	2.81	tonnes	1000	kg CO2e/tonne	2.8	Residential waste mass anaerobic digestion (ERWMADI) at 275 tonnes = 2.81
Other	Scope 3	10.5	tonnes	1000	kg CO2e/tonne	10.5	Residential waste mass used to create energy (ERWMENE) at 492 tonnes = 10.5
Other	Scope 3	7223	tonnes	1000	kg CO2e/tonne	7223.0	Staff commuting



	Other		5265 tonnes	1000 kg CO2e/tonne	5265.0	Student commuting
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**3c Generation, consumption and export of renewable energy**

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

Technology	Renewable Electricity		Renewable Heat		Comments
	Total consumed by the organisation (kWh)	Total exported (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	
Solar PV	219451	0	0	0	0 PV energy taken from John McKintyre, SCRM, ECA, KB, Appleton, ECCI. Renewable heat generation not included for 2018/19.

**3d Targets**

List all of the body's targets of relevance to its climate change duties. Where applicable, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included.

Name of Target	Type of Target	Target	Units	Boundary/scope of Target	Progress against target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Comments
Absolute carbon	absolute	86707	tCO2e reduction	All emissions	79552	2007/08	86707	tCO2e	2025/26	Our Climate Change Strategy sets an absolute target to reduce our emissions to 2007/8 baseline year levels by 2025; we have met this target. Our targets do not include staff and student commuting as we consider this out of scope due to issues of direct control over these emissions and the current difficulty in gathering robust data, although we report these to Scottish Government and elsewhere externally. In future we will be refining methodology and data collection for commuting and other scope 3 areas.
Absolute carbon/Zero by 2040	absolute	0	tCO2e reduction	All emissions	79552	2007/08	86707	tCO2e		Our Climate Change Strategy sets a target to be a zero carbon university by 2040 - this is achievable through proposed investments in renewables, and possibly woodland and/or peatland restoration in Scotland.
Relative carbon	percentage	50	total % reduction	All emissions	72.2	2007/08	156	£	2025/26	Our Climate Change Strategy sets the intensity emissions target to reduce emissions per £M turnover by 50% (to 78 tCO2e) from a 2007/8 baseline of 156 tCO2e per £M turnover. We have now met this target. Our targets do not include staff and student commuting, although we do report these to Scottish Government and elsewhere externally.
Waste reduction - academic estate	percentage	10	total % reduction	Waste		2016/17	73	kg	2022/23	The new Waste Strategy sets out a 10% reduction to 66kgs by 2022/23
Waste reduction - student accommodation	percentage	10	total % reduction	Waste		2016/17	66	kg	2022/23	The new Waste Strategy sets out a 10% reduction to 59kgs by 2022/23
Waste reduction - student catering	percentage	10	total % reduction	Waste		2016/17	71	kg	2022/23	The new Waste Strategy sets out a 10% reduction to 63kgs by 2022/23

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Reuse - academic estate	percentage	10 % increase	Waste		2016/17	5 Other (specify in comments)	2022/23	The new Waste Strategy sets out a 10% increase in reuse against a baseline of 5% reuse - academic estate
Reuse - student accommodation	percentage	90 % increase	Waste		2016/17	Other (specify in comments)	2022/23	The new Waste Strategy sets out a reuse rate of at least 90% fir furniture and equipment resulting from refurbishments - student accommodation
Recycling/composting - academic estate	percentage	80 % increase	Waste		2016/17	52 Other (specify in comments)	2022/23	The new Waste Strategy sets out an 80% increase in recycling/composting by 2022/23 against a baseline of 52%
Recycling/composting - student accommodation	percentage	80 % increase	Waste		2016/17	41 Other (specify in comments)	2022/23	The new Waste Strategy sets out an 80% increase in recycling/composting by 2022/23 against a baseline of 41%
Recycling/composting - student catering	percentage	80 % increase	Waste		2016/17	66 Other (specify in comments)	2022/23	The new Waste Strategy sets out an 80% increase in recycling/composting by 2022/23 against a baseline of 66%
Composting/AD - academic estate	percentage	40 total % reduction	Waste		2016/17	60 tonnes	2022/23	The new Waste Strategy sets out a 40% reduction in food waste to 36 tonnes from baseline
Composting - student catering	percentage	40 total % reduction	Waste		2016/17	57 tonnes	2022/23	The new Waste Strategy sets out a 40% reduction in food waste to 34 tonnes from baseline
Landfill diversion	percentage	99 total % reduction	Waste	99	2016/17		2022/23	The new Waste Strategy sets out maintaining the current 99% diversion of waste from landfill
Business travel	percentage	total % reduction	Staff travel		2007/08	tCO2e	2019/20	
Staff commuting - increase on foot travel	percentage	30 % increase	Other (please specify in comments)				2021/22	The new University integrated transport plan 2017-21 sets a target to increase the proportion of staff travelling on foot to the University to 30% (in 2016 the percentage was 25%).
Student commuting - increase on foot travel	percentage	60 % increase	Other (please specify in comments)				2021/22	The new University integrated transport plan 2017-21 sets a target to increase the proportion of students travelling on foot to the University to 60% (in 2016 the percentage was 57%).
Staff and student commuting - increase in cycling	percentage	15 % increase	Other (please specify in comments)				2021/22	The new University integrated transport plan 2017-21 sets a target to increase the proportion of students and staff cycling to the University to 15% (from 13% in 2016).
Car driving	percentage	29 total % reduction	Other (please specify in comments)				2021/22	The new University integrated transport plan 2017-21 sets a target to reduce car driving overall to 29% or less at each University campus (excluding Easter Bush), matching the Edinburgh Council Local Transport Strategy Target.
University fleet - electric vehicles	percentage	30 % increase	Transport				2021/22	The new University integrated transport plan 2017-21 sets a target to increase the proportion of electric vehicles in the University fleet from 4% in 2016-17 to 30%
Parking permit holders - EVs	percentage	2 % increase	Other (please specify in comments)				2021/22	The new University integrated transport plan sets a target to increase the proportion of parking permit holders using an electric vehicle from 0.4% in 2016-17 to 2%.

Business travel flight growth	percentage	10	tCO2e reduction	Staff travel		2016/17		2025/26	Decrease in expected growth of flights for business travel by 10% which equals 2375 tCO2e, as noted in the Climate Change Strategy
Energy reduction campaign including SCF		8363	tCO2e reduction	Energy use in buildings		2016/17		2025/26	Savings estimated from Energy Reduction Campaign of 8363 tCO2e by 2025 as noted in the Climate Change Strategy
Decrease from other policy and behaviour change projects		5340	tCO2e reduction	Energy use in buildings		2016/17		2025/26	Decrease in tCO2e from other policy and behaviour change estimated, as noted in the Climate Change Strategy

3e Estimated total annual carbon savings from all projects implemented by the body in the report year			
Total	Emissions Source	Total estimated annual carbon savings (tCO2e)	Comments
1961.59	Electricity	994.19	SCF projects approved (298.23 tCO2e); Energy engagement (552.96 tCO2e); refurbishment capital projects (143) Energy centre simple efficiency calculation shows a negative carbon efficiency with gas input having 1620 tonnes more CO2e emissions than that estimated for the total heat and electricity output.
	Natural gas	293	In previous reporting years this was not separated into different sources and was counted in electricity - 78; boiler replacement and vented cupboard conversion - 215
	Other heating fuels		
	Waste		We expect carbon savings before and after implementation of the new Waste Strategy, but these have been expressed as % reduction in kilograms of waste from 2016/17
	Water and sewerage	30.4	In previous reporting years, this was not separated into different sources and was counted in electricity - 17; School of Chemistry water saving measures - 13.4
	Business Travel	240	We estimate savings from the Business Travel campaign at almost 2400 tCO2e by 2025/26 - over the course of the 10 year Climate Change Strategy
	Fleet transport	80	We estimate savings from transition to electric vehicles (where possible) at 800 tCO2e by 2025/26 - over the course of the 10 year Climate Change Strategy
	Other (specify in comments)	324	Warpit

3f Detail the top 10 carbon reduction projects to be carried out by the body in the report year											
Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.											
Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments

SRS engagement activities	SRS	2019/20	Estimated			Grid Electricity	552.96		Energy engagement is assumed to save ca. 1.8GWh annually (1% of utility bill)
Warpit	SRS	2018/19	Estimated			WEEE (Mixed) Recycling	324		Reuse programme
Lighting upgrades Chancellors Court	Sustainable Campus Fund	2019/20	Estimated	253332		18 Grid Electricity	102.62	36294	
Lighting upgrades David Hume Tower	Sustainable Campus Fund	2019/20	Estimated	123000		18 Grid Electricity	50.03	16286	
Murchison House refurbishment	Capital Projects	2018/19	Estimated	14400000		Grid Electricity	76		Part of major refurbishment; cost is total refurbishment cost
Other lighting upgrades/improvements across campuses	Sustainable Campus Fund	2019/20	Estimated			18 Grid Electricity	145.58		Aggregation of emission savings from multiple projects across campuses e.g. Teviot, Pollock Halls, Dalhousie Land, St Leonard's Land, Paterson's Land, Old Nursery, George Square Theatre, Main Library, Grant House, Holland House, Alison House, Riego Street, Old College, Fleeming Jenkin, Arthur Place, Churchill House
Boiler replacements	BSG MR	2018/19	Estimated	354700		Natural Gas	117		Pollock Halls Energy Centre 110 / Abden House 7
QMRI vented cupboard conversion	SFC	2018/19	Estimated	14040		Natural Gas	98		Conversion of vented cupboard to separate extraction system rather than fume cupboard extract.
Law School refurbishment	Capital Projects	2018/19	Estimated	2700000		Grid Electricity	67		Part of major refurbishment - further carbon reductions will result from upgrades to mechanical systems but information on original systems is not available to quantify this. Cost is total for electrical systems
School of Chemistry water saving measures	SFC/SCF	2018/19	Estimated	50190		Water - Supply	13.4		Replacement of laboratory mains to drain cooling equipment with waterless condensers and recirculating chillers

<b>3g Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the report year</b>				
If the emissions increased or decreased due to any such factor in the report year, provide an estimate of the amount and direction.				
<b>Total</b>	<b>Emissions source</b>	<b>Total estimated annual emissions (tCO2e)</b>	<b>Increase or decrease in emissions</b>	<b>Comments</b>
0.00	Estate changes		Decrease	We approach this and the future year section by presenting our relative emissions. Our GIA has increased by 2% in 2018/19 (previous year's figure was an estimate), with an estimated additional GHG emissions impact in the region of 1300 tCO2e - our carbon intensity/relative emissions for GIA have slightly decreased since 2017/18.
	Service provision		Decrease	
	Staff numbers		Decrease	Staff numbers have slightly decreased but carbon intensity/relative emissions per staff member have decreased slightly since 2017-18 to 8.30 per FTE staff member.

	Other (specify in comments)		Increase	Student numbers have increased - due to a decrease in total carbon emissions our carbon intensity/relative emissions per student have only slightly increased from 2017-18 to 2.10 per FTE student.
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3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead			
Total	Source	Saving	Comments
0.00	Electricity		Please see explanation in Section 3K.
	Natural gas		
	Other heating fuels		
	Waste		
	Water and sewerage		
	Business Travel		
	Fleet transport		
	Other (specify in comments)		

3i Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the year ahead				
Total	Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
0.00	Estate changes		Decrease	Our estate is predicted to increase by 0.5% in the next year and 1% over the next five years so that our relative carbon emissions per meter squared will decrease, also with decrease in our absolute emissions. The estimated increase in GHG emissions associated with growth in 2019/20 is 400tCO2e.
	Service provision		Decrease	



	Staff numbers		Decrease	Our staff numbers will remain the same or increase in the next year and so our relative carbon emissions per member of staff will decrease, also with decrease in our absolute emissions.
	Other (specify in comments)		Decrease	Our student numbers are set to increase next year, and so our relative carbon emissions per student will decrease, also with decrease in our absolute emissions.

**3j Total carbon reduction project savings since the start of the year which the body uses as a baseline for its carbon footprint**

If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").

Total	Comments
44286.59	Total reported for 2014/15 (8500 from CHP), total reported for 2015/16 (16871), total of projects calculated for 16/17 (13188), total 17/18 (3766), total for 18/19 (1961.59)

**3k Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to its emissions, targets and projects.

Energy update for 2018-19

Over the last year gas consumption (including energy centre fuel) has increased by 6%. Energy Centre engineering works have improved CHP uptime, allowing an increase in on-site energy generation. As a result, grid electricity purchases have decreased by 12%.

Through 2018 we have recorded decreases in operational utility consumption (gas, heat and electrical demand in buildings). There has been a 7% reduction in (non-energy centre) gas demand, a 5% reduction in building electricity demand and a 4.8% reduction in building heat demand.

Over the last year our campus footprint (m2) increased by 2%. Our gas consumption per square meter (kWh/m2) increased by 4% largely due to an increase in energy centre CHP engine run hours. Our electricity consumption per square meter (kWh/m2) decreased by 13.7%. Although it would be expected that electricity consumption per square meter would increase with growing density and energy intensity (e.g. building IT loads, increased cooling loads, increased research activity) the decrease in electricity intensity in 2018/19 is largely due to an increase in on-site electricity generation.

The University of Edinburgh leads the sector in its commitment to fund and deliver projects which support our Energy Strategy and 'Zero by 2040' campus objectives. The Estates Department and the Department for Social Responsibility and Sustainability have collectively driven the delivery of ninety-two energy efficiency and renewable energy projects through 2018/19. Funding of £4.75m is available through the Sustainable Campus Fund (SCF) and funding of £5.2m was secured through the Scottish Funding Council University Carbon Reduction Fund (SFC UCRF) to support carbon reduction initiatives. At the end of 2018/19, £7.3m of projects have been approved delivering £1.1m in annual cost savings and 3,400 TCO2e of GHG emissions.

The Estates Department has adopted better engineering and management practices in the last years in order to reduce carbon emissions due to fluorinated greenhouse gases. Control measures were implemented during the whole lifecycle of the equipment.

Designers and Project Managers are encouraged to consult the Building Services Engineers at the earliest opportunity and, specifically for equipment with fluorinated greenhouse gases, it is important to provide full feasibility studies for both information and review during the early stages of the project. These should include load assessments, review of applicable legislation, maintenance requirements, annual energy savings and carbon emissions assessments. Other examples of recommendations include maximising the use of free cooling, where feasible, being the most energy efficient way of providing cooling to the buildings, or limiting the use a centralised VRF system only where there is no connection to the University's district heating/cooling networks.

In all cases, selection of refrigeration systems shall always consider the restrictions imposed by the F-Gas Regulations.

During the operational life of the equipment, maintenance requirements and guidance are specified during tendering process. Leak tightness is ensured by maximising frequency of servicing during the year and in case of leak detection, the use of recycled or reclaimed gases is always prioritised. All steps are actively logged and reported by the engineers: quantities and type of fluorinated greenhouse gases installed and added, and whether the quantities of installed gases have been recycled or reclaimed, including batch number.

Further actions taken during the last academic years, included a replacement programme of R22 refrigerant with R32 and a condition survey of the chillers currently on the premises with relative replacement programme looking to more energy efficient alternatives once they will reach end of operational life.

GIA update

The University of Edinburgh continues to increase the size of its estate to cope with the increase in undergraduate numbers and the large amount of research being undertaken within the institution. Increases in size are carefully considered and created using a strict set of key performance indicators covering areas such as cost per sqm, energy efficiencies, user comfort, to name but a few.

Transport update 2018-19

A number of sustainable travel projects were delivered in 2018-19, having successfully applied for £57k of external funding and securing a fully funded Campus Cycling Officer through Cycling Scotland. Significant progress was made on student bus travel, with the University Executive supporting a recommendation to remove the shuttle bus service and secure a cheaper Student Ridacard for all.

#### Bus provision

Bus Operations Analysis: a University wide review of public bus services, campus and residential connectivity, shuttle bus provision, ticketing options and benchmarking these against other institutions has been carried out. The analysis made recommendations for a sustainable approach to the provision of bus services for students by reducing the reliance on a private shuttle bus and improving access to public transport ticketing and routes. The delivery phase of this project has commenced in 2019-20.

#### Just Eat Cycles

At the start of 2018-19, the Edinburgh Cycle Hire Scheme, operated by Serco and sponsored by Just Eat, was launched. This followed the University commencing a partnership at the start of 2017-18 with Transport for Edinburgh to support the procurement and delivery of a city-wide public cycle hire scheme. Uptake by students and staff was low during 2018-19, with known factors now being addressed in 2019-20, including the provision of more stations and a membership deal.

#### Cycling and walking (Active Travel)

University Transport Guides: Paths for All provided £10k of match funding to the University to design and print two Transport Guides for new students and staff. This £20k project developed a map and sustainable travel information for the University overall, and for the King's Buildings. This has been accompanied by a redesign of significant parts of the Transport website, where the guides can also be downloaded: <https://www.ed.ac.uk/transport/welcome>. The guides have been distributed to all new students at Welcome Events and via the Schools.

Look Out For Each Other - Road Safety Campaign: the University partnered with the Council, Lothian Buses, and Police Scotland to develop and deliver this road safety campaign to encourage cyclists to use lights at night.

Dr Bike: The University offers free basic bike mechanic services for students and staff at regular sessions across the Estate. This is a very popular and valued service. For 2018-19 the University partnered with The Bike Station and successfully applied for match funding from Paths for All. The £3000 budget for Dr Bike was more than doubled to an additional £8545 and increased the Dr Bike sessions from 32 to 46 per year and provided 18 free bike maintenance courses for 100 students and staff. The 46 Dr Bike sessions provided free maintenance and advice to over 550 students and staff.

Cycle Friendly Employer Award - IGMM: Following investment in the existing IGMM bike store to increase capacity, and reflecting the existing shower and changing facilities and community of cyclists, the University achieved the Cycle Friendly Employer Award for the IGMM in early 2019.

New or improved cycle parking, shower and changing facilities were delivered across the Estates using £40k of grant funding together with £35k of University funding. This led to one of our campuses achieving the Cycle Friendly Employer Award.

#### Business travel update 2018-19

##### Data error for 2017-18

We noted an issue with our calculation which was duplicating the carbon for a number of journeys for 2017-18. This was not realised until after the 2017-18 report to SG was submitted. As such the actual figures for 2017-18 were significantly lower than reported once the data had been recalculated. The recalculated figure totalling 13,696 Tonnes CO<sub>2</sub>e rather than 18,200 Tonnes CO<sub>2</sub>e as initially reported. As such there has been an increase in carbon emissions to 2018-19 of 35%. The explanation for this rise in emissions is that there have been a significant increase in journeys, specifically in carbon-intensive air journeys which increased from 23,506 to 32,648 (39% increase).

##### What steps have been taken to address business travel emissions?

We are working with an increasing number of individual teams to address their business travel. The start of this work is to raise awareness of the scale of business travel emissions. We aim to adapt the reporting tool to allow a wider range of data, and wider range of report outputs (e.g. to individual level), and share it with other institutions. University of Edinburgh is now leading an international network of FHE institutions through the Roundtable of Sustainable Academic Travel. This network looks to build collaboration on solutions to reduce business travel emissions across the sector. Over 85 global institutions registered to date from 20 countries. An institution wide working group has been agreed by University senior leadership to put recommendations forward for reducing business travel. A report is due in early 2020. A working group has been initiated to review video collaboration tools across the University and establish how to increase use of video collaboration tools across staff and students. A report is due from this group by June 2020.

**PART 4: ADAPTATION****4(a) Has the body assessed current and future climate-related risks?**

If yes, provide a reference or link to any such risk assessment(s).

University of Edinburgh Estates has conducted a flood risk assessment for critical engineering infrastructure (high voltage electricity networks and district heating). Risk assessments are undertaken for new builds as a matter of good practice. Building on this work and other responses to risks to operations, SRS and Estates have developed a formalised adaptation framework to capture this existing work and extend it. The Framework reflects a whole institution approach, in keeping with the overarching Climate Change Strategy for the University.

It has identified the following high level risks:

Physical risks -

- Increased flood risk, threatening the estate (particularly the historic environment); water shortages from drought in summers, affecting University-owned land;
- Changes in the balance between heating and cooling, leading to the need to adapt performance and design, construction, management and use of buildings and surroundings

Physical and supply chain risks:

- Global energy market impacts affecting energy supplies and energy security, and disruption to global water supply and food supplies;
- Possible disruption of transport, energy and communication networks in Scotland and around the world, impacting markets and affecting supply chains

Reputational risks -

- Lack of resilience in terms of physical and supply chain risks could mean that the University feels the effects of a potential decrease in student enrolment and international collaboration ambitions;
- Lack of action and collaboration on climate change adaptation, on the University's direct premises and with external actors, could damage the University's brand reputation for excellence in teaching and research, in addition to its vision to make impactful contributions to society more broadly.

The framework was approved earlier this year and launched in May 2019 at the European Climate Change Adaptation conference and a new adaptation working group has been formed to facilitate comprehensive mapping and ranking of risks at campus level, including decisions on what actions to take.

The new sustainable design guidelines, which will apply to new builds and existing buildings, have adaptation embedded within them and aligns with the Adaptation Framework.

**4(b) What arrangements does the body have in place to manage climate-related risks?**

Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.

Risk management procedures are undertaken by Estates in relation to each building on campus and adaptation is now on the Estates risk register. The Adaptation Framework collates existing practice and provides a holistic guide following the whole institution approach of the Climate Change Strategy. The Adaptation Framework asserts the following vision:

The University of Edinburgh will become more climate resilient, creating a sense of place on campuses and promoting wellbeing and biodiversity, as an integral part of the wider context of the city of Edinburgh.

The Framework proposes priority actions within a whole institution approach:

Priorities in research, learning and teaching -

- Applying adaptation research to campuses as part of the city of Edinburgh and as part of living lab projects
- Comprehensive mapping and ranking of risks to research, especially where environmental conditions must be controlled for storage of materials (e.g. biobanking of medical, veterinary and biological samples in ULT freezers); but also risk assessment of potential disruption to supply chains (e.g. impact of interruption in liquid helium deliveries)
- Considering ways of teaching in the context of adaptation that can widen participation and enhance student experience in a changing climate (e.g. remote teaching options and teaching times)
- Inclusion of adaptation in induction materials that introduce the Climate Change Strategy

Priorities identified for operations and landscaping -

- Comprehensive mapping and ranking of risks to the Estate including buildings, infrastructure services and natural environment and development of Estates adaptation risk management plan
- Ensuring adaptation is central in the development of the Edinburgh estates sustainable design principles for both new builds, existing buildings and their landscaped contexts
- Consideration of climate matching and surface water retention in landscaping, with possible testing of the Natural Capital Standard for Green Infrastructure and geodiversity approaches
- Further mapping of non-Estates (non-physical) risks (financial, student experience, other reputational, etc)

Priorities in renewables technology -

- Considering value of local power generation and supply - solar

Priorities for partnership working -

- Maintaining strong relationships within existing partnerships (Edinburgh Adapts, Edinburgh Living Landscape Partnership), including ensuring strong communication links with the City of Edinburgh Council
- Developing new local, regional and international partnerships to progress thinking and action in adaptation
- Exploring funding opportunities at UK and EU levels for innovative pilot projects to test on University campuses

Priorities for communications as part of a climate ready community -



- Raising awareness of the importance of adaptation amongst staff and students through targeted events
- Raising public awareness of University projects in this space, considering how to communicate messages effectively, including signposting at sites

**4(c) What action has the body taken to adapt to climate change?**

Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action.

The University of Edinburgh already conducts significant multi-disciplinary and high impact research on the global challenge of climate change, as detailed in the Climate Change Strategy 2016-2026. This research spans humanities and social sciences, science and engineering and medicine and veterinary medicine. Recent climate change adaptation research projects led by University of Edinburgh investigators or with the University in international partnership include ARIES (Adaptation and Resilience in Energy Systems), LUC4C (Land Use Change: assessing the net climate forcing, and options for climate change mitigation and adaptation), IMPRESSIONS (Impacts and Risks from High-End Scenarios: strategies for innovative solutions), OPERAs (Operational Potential of Ecosystem Research Applications) and CLIMSAVE (Climate Change Integrated Assessment Methodology for Cross-sectoral Adaptation and Vulnerability in Europe). ClimateXChange, located in the Edinburgh Centre for Carbon Innovation (ECCI) at the University has provided evidence through research to the Scottish Government to shape policies in the area of adaptation. The University provides students with a grounding in climate change adaptation through the MSc in Carbon Management, PG Cert Climate Change Management and MSc Global Challenges, for example. Staff and student inductions in future will include an introduction to the climate change strategy, considering both mitigation and adaptation. Climate change affects disadvantaged groups most and could potentially create barriers to the University experience for potential students from sub-Saharan Africa or the Middle East. University programmes are already addressing this issue through, for example, 20 scholarships to fund students from climate change vulnerable countries for the Postgraduate Certificate in Climate Change Management, as a component of the MSc in Carbon Management.

Several living lab research projects in the adaptation space have been undertaken by students and staff to begin to realise adaptation strategy goals. Carbon Finance and Carbon Management MSc students, acting as consultants, developed a business case for adaptation using a multi-criteria analysis. MSc Advanced Sustainable Design students and student volunteers across disciplines collaborated to re-envision a building on central campus for future learning and climate. Students taking the postgraduate course, Case Studies in Sustainable Development, collated best practice in adaptation across a range of institutions, to provide exciting examples for the University to consider. A student on placement with SRS mapped green spaces at Pollock Halls to trial the Scottish Wildlife Trust’s Natural Capital Standard tool, which considers the importance of green and blue infrastructure for adaptation and biodiversity, as well as mitigation. This tool is being developed, with student input, into an app for use by staff and students, and with potential to be applied to the city context. A current project underway with Historic Environment Scotland considers how to adapt a grade B listed lecture theatre through refurbishments and has potential to engage engineering students in modelling of internal hot and cold balance; this feasibility study is meant to lay the ground for further refurbishment projects that result in both greater energy efficiency in and adaptation of existing buildings.

The University of Edinburgh has responded with adaptation actions to past extreme weather events that affected campus buildings. The University has experienced flooding, high winds, complaints of overheating in buildings and high snow fall over the past ten years. A flood risk assessment was undertaken for critical engineering infrastructure and a snow management plan developed. The University exhibits a solid understanding of how to implement measures in landscaping to address adaptation, including provision for biodiversity conservation. Landscaping plans for University grounds in 2017-18 included: - mapping of mowing regimes - planting beds and biodiversity sites - a review of grass cutting regimes - extension of grassland meadows - expansion of green corridors, mass bulb planting - identifying potential locations for tree planting - active involvement in new developments.

Sites such as Pollock Halls exemplify a successful approach to adaptation. Sustainable drainage systems using natural land contours have also been employed to reduce flood risk, as can be seen at the Easter Bush campus.

The University already works in partnership on adaptation with local organisations such as the City of Edinburgh Council, which leads Edinburgh Adapts, and with members of the Edinburgh Living Landscape (ELL) Partnership. These partnerships link the University to wider city and regional contexts. Edinburgh Adapts launched its adaptation action plan for the city at the end of 2016, including a list of projects that the University aims to support as part of its own actions. A new collaboration with Scottish Wildlife Trust to trial their Natural Capital Standard is in completion and it has resulted in development of the green spaces mapping "app" that can be used by students and staff to inform them about University green spaces and campus vulnerabilities to risks, but also by Estates in development plans. We are also collaborating in terms of built environment and adaptation with Historic Environment Scotland on a feasibility study to adapt a post-war listed lecture theatre; this project involves heat mapping and monitoring temperature and moisture within and on the exterior of the building. The University aims to expand partnerships, considering European and international collaborators.

**4(d) Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?**

<p>If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1,B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year. If it is not responsible for delivering any policy or proposal under a particular objective enter "N/A" in the 'Delivery progress made' column for that objective.</p> <p>(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.</p>					
Objective	Objective reference	Theme	Policy / Proposal reference	Delivery progress made	Comments
Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment		The University through its world-leading research is contributing towards a better understanding of climate change and its impacts on the natural environment, for instance through our School of Geosciences. Specific projects have been listed.	
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment		The University through its landscape management aims to promote and sustain local biodiversity systems. The Climate Change Strategy 2016-26 calls for organisational alignment and a review and update of the existing University biodiversity policy - a new policy and strategy have been drafted that link closely with the adaptation framework.	
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment		The University through its landscape management aims to promote and sustain local biodiversity systems. The Climate Change Strategy 2016-26 calls for organisational alignment and a review and update of the existing University biodiversity policy - a new policy and strategy have been drafted that link closely with the adaptation framework.	
Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks		The University through its world-leading research is contributing towards developing new energy systems and low carbon technologies, as well as contributing to understandings of how climate change impacts the built environment and infrastructure. The Climate Change Strategy 2016-26 emphasises the importance of considering the built environment and surroundings - a review of the University's current understandings of estates sustainable design practice has been undertaken and new bespoke guidelines are being trialled, which include consideration of adaptation measures. The adaptation framework also aligns with design guidelines and provides related priorities for action.	
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks		The University through its world-leading research is contributing towards developing new energy systems and low carbon technologies, as well as contributing to understandings of how climate change impacts the built environment and infrastructure. The living lab approach encourages academic staff and students to apply their research to University operations,	

				with a view to mitigation and adaptation in relation to buildings and infrastructure. The Climate Change Strategy 2016-26 emphasises the importance of considering the built environment and surroundings through development of new estates sustainable design guidelines, which include consideration of adaptation measures. An aligned adaptation framework provides for further management.	
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	B3	Buildings and infrastructure networks		The University incorporates resilience measures in its Estates development planning and landscape management. The development of the new adaptation framework strengthens current approaches to increase resilience and sustain and enhance benefits and services.	
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society		The University through its world-leading research is contributing towards a better understanding of climate change and its impacts. This includes research on low carbon technologies, policies and law. The Energy and Society Research Group in the School of Social and Political Science, for example, contributes to understandings.	
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society		The University through its community relations and public engagement aims to increase awareness of the impacts of climate change to its students, staff and local community. This has been delivered through public lectures, online learning and degree programmes, examples noted in previous sections. A research hub is also under development to showcase University research in climate change mitigation and adaptation, with the aim of raising awareness.	
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	S3	Society		The University is developing a strand within adaptation and biodiversity that addresses health and wellbeing, which could be expanded to include consideration of this issue (although it is more likely to remain focused on the importance of green spaces to health and wellbeing).	

**4(e) What arrangements does the body have in place to review current and future climate risks?**  
 Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

Climate-related risks are managed by the departments with functional responsibility, with support from the Department for Social Responsibility and Sustainability. Adaptation and climate risks are now in the Estates Risk Register, and a new adaptation working group has been formed to progress risk mapping and actions. Risks are also reviewed by the SRS Committee and relevant sub-committees. The new comprehensive Adaptation Framework provides means to identify how future climate risks will be managed and addressed. It proposes review of the developed risk resilience plan every three years, with yearly review and updating of actions to be undertaken.

**4(f) What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?**

Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).

The Adaptation Framework will deliver a monitoring and evaluation system to understand the impact of adaptation actions. The approach will identify, evaluate and monitor adaptation actions, following Adaptation Scotland guidance to: assess climate threats and opportunities, assess climate risks and identify actions, report and implement, monitor and review.

**4(g) What are the body's top 5 priorities for the year ahead in relation to climate change adaptation?**

Provide a summary of the areas and activities of focus for the year ahead.

Our key priorities are:

- 1) Within the adaptation framework, continuing to develop living lab research projects to apply to University operations
- 2) Comprehensive mapping and ranking of risks across the Estate, and considering non-physical risks, as part of adaptation strategy actions
- 3) Ensuring that adaptation is fully considered in practice via guidance in the Edinburgh sustainable building design standard
- 4) Strengthening and continuing to grow partnership for adaptation action at city, UK and international levels

#### 4(h) Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to adaptation.

Our whole institution approach to an adaptation framework could be seen as leading in the sector, as well as our inclusion of biodiversity. We follow advice from Adaptation Scotland and align with Edinburgh Adapts and in this way can exhibit best practice in the area of adaptation. The Community Engagement programme connects the University with local communities and actions towards city resilience and adaptation, for instance <https://www.ed.ac.uk/about/sustainability/governance-publications-reports/reports/2016-17/themes/community-engagement>).



**PART 5: PROCUREMENT****5(a) How have procurement policies contributed to compliance with climate change duties?**

Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.

The University Procurement Strategy 2017 underpins the Strategic Plan and priorities are led by SRS Committee and the SRS Department. The Strategy notes that University Procurement aims include priorities for Social Responsibility and Sustainability (SRS) - how we prioritise and monitor risks and benefits, delivering impact for society, and link to related activities led by SRS Committee e.g. using shared tools to prioritise, and assessing against the flexible framework for progress on: " Modern Slavery Act " Good Food Policy " Zero Carbon Policy " Community Engagement.

Procurement matters in the University as it not only delivers value for money but sets the tone for ethical business and responsible dealings with our commercial partners. The University also considers insisting on appropriate and proportionate contract conditions that provide assurances on fair and ethical supply chains, both contracting directly or via main contractors or with collaborators. The Procurement Office is working with the SRS Department, and budget holders from different areas of the University, to build on our existing sustainable procurement procedures in order to comply with the Sustainable Procurement Duty as well as to meet the University s aspirations on social responsibility, sustainability, fair trade and the Scottish Government's Business Pledge. Please see SRS Procurement pages at <https://www.ed.ac.uk/about/sustainability/about/programmes/fairness-trade-sustainable-procurement/srs-impacts-supply-chains>

As part of a two year carbon reporting project, SRS and the Procurement Office are investigating ways to better understand carbon emissions from University procurement. We aim to identify our main sources of emissions (outside of business travel, which we already capture). This work would not only benefit the University of Edinburgh but could guide a sector-wide approach to capturing and reporting emissions from procurement.

Currently, a spend-based methodology is recommended by Higher Education Statistics Agency (HESA). However we will test non-spend methodologies based on the GHG Protocol guidance (e.g. supplier specific, hybrid and average data), in areas where we believe that data are most robust; part of this testing would include comparing emissions calculated using these methods to spend method calculations. The project has the following objectives:

" Calculate it differently (with GHG methods), working with suppliers to gather required data/illustrate potential savings clustered in categories: Deliveries (including labs), Food, Construction

\* Align with carbon goals 2040 and provide any guidance to partners/network

" Specify key business partners correlated with main emissions

" Provide carbon savings and consider innovative off-setting activities related to sequestration and biodiversity that align with our biodiversity strategy and its tools (GI mapping application)

In order to complete this project, we are drawing on our postgraduate students through a living lab project that will test non-spend approaches and have obtained agreement from consultancy, Ecometrica, to provide us with spend-based calculations for comparison. At the end of the project we will be much closer to understanding our emissions from procurement.

A new labs procurement contract will include flexible requirements for suppliers to provide data of use for our emissions calculations, requirements based on type of supplier.

**5(b) How has procurement activity contributed to compliance with climate change duties?**

Provide information relating to how procurement activity by the body has contributed to its compliance with climate changes duties.

The University uses available shared tools such as Sustainable Procurement Prioritisation, Life Cycle Impact Mapping, Sustainability Test and the Flexible Framework assessment tool, and is working towards the highest level (5) wherever possible. Working with SRS colleagues, we have also begun preliminary work to align the University with the recent ISO 20400 Sustainable Procurement guidance. Assessments of social responsibility and sustainability issues across a number of procurement spend categories have been undertaken to identify risks and to raise awareness of the range of issues that arise when buying goods and services. The Sustainable Public Procurement Prioritisation Tool has been used to review high-risk categories including estates, food and catering, information and communication technology, laboratories and travel. Risks and opportunities are considered at each stage of the lifecycle from extraction of raw materials, through manufacture, logistics, use and end-of-life/re-use. The Test Tool adopts Scottish Government guidance to address Climate Change related to carbon in production, use and consumption, vehicles and adaptation, as well as other issues like biodiversity and materials scarcity. Priority areas agreed by the SRS Committee for 2016 continue to be travel, food, electronic equipment and laboratory consumables, with Estates and Works prioritised for 2017.

**5(c) Supporting information and best practice**

Provide any other relevant supporting information and any examples of best practice by the body in relation to procurement.

The Procurement Office has recently formed an internal sustainability group that is organising procurement response to key UoE commitments, including the Zero by 2040 University Climate Strategy. We are also mapping activity in procurement to the Sustainable Development Goals, including on Climate Action, and also engaging with those who develop Financial Business cases at the University to ensure the action on emissions reduction is practically incorporated into UoE procurement wherever it is appropriate and will have the most impact

The Scottish Government (based on United Nations) Flexible Framework assessment tool, continues to be used by the University to assess its level of sustainable procurement overall performance and the actions required for improvement. Using a standard but flexible approach helps to reveal and implement relevant steps to embed good procurement practice to achieve sustainable outcomes. The University of Edinburgh is now one of the first institutions to have used this toolset to implement the Sustainable Procurement Duty, which will help the University to embed appropriate and consistent measures to leverage procurement to improve social, economic and environmental outcomes.

Modern Slavery.

The University publishes a statement regarding the Modern Slavery Act 2015 which sets out our approach to ensure that slavery and human trafficking is not taking place in our supply chains or in any part of our activities, as a fair trade university we adopt a range of related policies.

Good Food Policy

The Good Food Policy will be kept under review to deliver a relevant approach to regulated procurements involving the provision of food, and research in animal welfare will be kept under review by SRS Committee and catering team.

2018/19 Good Food Implementation Plan update and good food actions, Accommodation Catering and Events (ACE) at University of Edinburgh:

- Improved drinking water provision by implementing the recommendations of the drinking water review (installing water points around campus). ACE also increased bottled water prices and began selling reusable Dopper bottles – probably best for this to go in waste / circular economy section.
- Healthy food ranges were developed and expanded in 2018/19
- 1 vending machine in the Main Library was converted into a healthy vending machine and ACE are now actively exploring options to enhance the healthy vending offering available to University departments
- Rolled out coffee grounds collections to all cafes in 2018/19. Coffee grounds are now recycled into fertilizer by a Glasgow-based company.
- ACE removed plastic straws. Only paper straws now available for purchase. Plastic stirrers were also removed.
- This was the first year of the 25p cup tax and 37% fewer disposable cups were used compared to last year – a reduction of 223k cups. Also averaged 50% usage of hot beverage sales in disposable cups compared to 86% last year.
- Farmers market continued to run in 2018/19
- In 2018 ACE re-achieved their 2 star rating from the SRA
- ACE ran 17 cookery classes for students

In terms of next steps, the University has the 50% veggie/vegan commitment, increasing the disposable cup tax (already implemented) and other work on single use items.

Zero Carbon Policy

The Zero Carbon Policy will be kept under review to make sure that the University's policies in waste, transport, procurement and food are aligned with this strategy.

Community Engagement

For procurement over £4million, the delegated authority of the University will consider how the acquisition can improve the economic, social or environmental wellbeing of our area through inclusion of community benefit clauses, to assist with our strategic objective of Community Engagement and Edinburgh Local. The Procurement Office also is prioritising supplier development and engagement activity to improve environmental performance and support innovation. For example, the SRS and Procurement office have created a suite of supplier sustainability guidance for each commodity category and have also worked with University's Edinburgh Centre for Carbon Innovation, co-leading a successful EIT Climate KIC bid to support our construction suppliers to decarbonise the built environment

**PART 6: VALIDATION AND DECLARATION**

**6(a) Internal validation process**

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

The standard of this report has been verified internally by members of the Department for Social Responsibility and Sustainability, Estates and Procurement.

**6(b) Peer validation process**

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

The standard of this report has been verified internally by members of the Department for Social Responsibility and Sustainability, Estates and Procurement.

**6(c) External validation process**

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

External verification has been undertaken for 2015/16, 2016/17, 2017-18 data submitted to the Ecometrica platform. This will continue to be undertaken every year.

**6(d) No validation process**

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

N/A

**6e - Declaration**

I confirm that the information in this report is accurate and provides a fair representation of the body's performance in relation to climate change.

Name	Role in the body	Date
Elizabeth Vander Meer	Research and Policy Manager (Climate and Biodiversity)	2019-11-21



**RECOMMENDED – WIDER INFLUENCE**

**Q1 Historic Emissions (Local Authorities only)**

Please indicate emission amounts and unit of measurement (e.g. tCO2e) and years. Please provide information on the following components using data from the links provided below. Please use (1) as the default unless targets and actions relate to (2).

(1) UK local and regional CO2 emissions: **subset dataset** (emissions within the scope of influence of local authorities):  
 (2) UK local and regional CO2 emissions: **full dataset**:

**Select the default target dataset**

**Table 1a - Subset**

Sector	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Units	Comments

**Table 1b - Full**

Sector	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Units	Comments

**Q2a – Targets**

Please detail your wider influence targets

Sector	Description	Type of Target (units)	Baseline value	Start year	Target saving	Target / End Year	Saving in latest year measured	Latest Year Measured	Comments

**Q2b) Does the Organisation have an overall mission statement, strategies, plans or policies outlining ambition to influence emissions beyond your corporate boundaries? If so, please detail this in the box below.**

The University's Climate Change Strategy 2016-26, Zero by 2040, embraces a whole institution approach, which includes ambition to influence emissions beyond our institutional (operational) boundaries through research, learning and teaching, as well as future investment in renewables and continued investigation of sequestration opportunities. The University conducts world leading research addressing climate change and sustainability issues, responding with multi-disciplinary and high-impact research across a range of disciplines. This research spans behavioural and social change, cultural and technology studies, policy, law and business in the College of Humanities and Social Science. Research in the College of Science and Engineering includes development of emissions mitigation technologies, approaches to sequestration, alternative energy sources, offshore renewables and power systems. The Global Environment and Society Academy (GESA) is one of four Global Academies at the University encouraging multi-disciplinary responses to challenging global issues through teaching, research and outreach. GESA's mission is to provide pioneering, tangible and joined-up solutions to the challenges created by global environmental change. The Academy communicates interdisciplinary research and engages with civil society. The Global Challenges Lab showcases on-going collaborative projects of the Global Academies including GESA to demonstrate how research and learning lead to impact and transformation (see <https://global.ed.ac.uk/our-work/global-challenges-lab>). The Edinburgh Centre for Carbon Innovation (ECCI) at the University of Edinburgh (<http://edinburghcentre.org/>) has wide-ranging impact, bringing together low carbon leaders and practitioners from business, finance and the public sector to accelerate and catalyse large-scale low carbon projects. Networks developed stretch around the world. ClimateXChange, Scotland's Centre of Expertise on Climate Change, at ECCI provides independent advice to government policy and public agency teams on decision-making for low carbon. Climate-KIC at ECCI is the EU's largest climate entrepreneurship programme to support entrepreneurs in developing innovative ideas.

**Q3) Policies and Actions to Reduce Emissions**

Sector	Start year for policy / action / implementation	Year that the policy / action will be fully implemented	Annual CO2 saving once fully implemented (tCO2)	Latest Year measured	Saving in latest year measured (tCO2)	Status	Metric / indicators for monitoring progress	Delivery Role	During project / policy design and implementation, has ISM or an equivalent behaviour change tool been used?	Please give further details of this behaviour change activity	Value of Investment (£)	Ongoing Costs (£/year)	Primary Funding Source for Implementation of Policy / Action	Comments

Please provide any detail on data sources or limitations relating to the information provided in Table 3

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Q4) Partnership Working, Communication and Capacity Building. Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below.									
Key Action Type	Description	Action	Organisation's project role	Lead Organisation (if not reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Partnership Working	Participation as part of the Steering Group for Edinburgh Adapts	Partnership working of climate change or sustainability	Participant	Edinburgh Council				Adaptation actions agreed for the city of Edinburgh	
Partnership Working	Participation in ESDP work for Edinburgh	Partnership working of climate change or sustainability	Participant					Sustainable development strategies for Edinburgh	
Partnership Working	Behaviour change programmes	Behaviour Change	Participant					Encouraging repair, reuse and recycling	
Partnership Working	Participation in EAUC network activities	Partnership working of climate change or sustainability	Participant					Sustainability measures and information sharing, support to HE and FE in developing climate action plans	
Partnership Working	Participation in International Sustainable Campus Network	Partnership working of climate change or sustainability	Participant					Knowledge exchange	
Partnership Working	Collaboration with Historic Environment Scotland to develop an adaptation case study	Partnership working of climate change or sustainability	Lead					Working with HES to adapt a listed building and use as a case study	
Partnership Working	Collaboration with Scottish Wildlife Trust to trial and develop their Natural Capital Standard for Green Infrastructure	Partnership working of climate change or sustainability	Participant					Development of an application to map green spaces and development of the Standard for use	
Partnership Working	European and international exchanges	Skills/Capacity Building	Participant					Exchange of knowledge within the HE sector, worldwide	

Partnership Working	Higher Education Procurement Authority (HEPA) Responsible Procurement Working Group	Partnership working of climate change or sustainability	Participant						
Partnership Working	Principles for Responsible Investment (PRI)	Partnership working of climate change or sustainability	Participant						

**OTHER NOTABLE REPORTABLE ACTIVITY**

**Q5) Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below.**

Key Action Type	Key Action Description	Organisation's Project Role	Impacts	Comments
Food & Drink	Good Food Policy	Lead	In August 2016, the University approved the first Good Food Policy to drive progress in five key areas: sourcing, provision, practice, research learning & teaching and leadership & culture. The University is committed to providing healthy, sustainable and affordable food to the University community, and also aims to support staff and student-led projects and research to enhance food sustainability at the University.	The Good Food Policy was developed by the Department for Social Responsibility and Sustainability (SRS), the Department for Accommodation, Catering and Events (ACE) and the Procurement Office. Departments work together to implement the policy.
Biodiversity	Newly written biodiversity strategy and updated biodiversity policy	Lead	To improve actions on biodiversity across University campuses, and to contribute to city and Scottish biodiversity goals.	

**Q6) Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template**



**Sustainability Strategy Advisory Group (SSAG)**

**30 January, 2020**

**Scottish Government Public Bodies Duties Reporting Consultation**

**Description of paper**

1. This paper presents and includes the SRS Consultation Response to the Scottish Government Public Bodies Duties reporting consultation.

**Action requested**

2. The SSAG is asked to note and discuss the consultation response paper.

**Recommendation**

3. The SSAG should note and discuss the consultation paper.

**Background and context**

4. The Scottish Government opened a consultation in September 2019 focused on the role of public sector bodies in ending Scotland's contribution to climate change. The consultation is part of the Big Climate Conversation, in response to the global climate emergency. Questions posed centred around whether the public sector climate change reporting duties should be revised to support Scotland's ambitions in light of the climate emergency. SRS submitted a response by the deadline of 11 December 2019.

**Discussion**

5. Key issues/points from the consultation response will be introduced briefly here. In terms of additional training, information or guidance (Q1), the SRS response noted the importance of structured awareness-raising and leadership programmes across the public sector, community engagement guidance and a comprehensive and holistic approach to procurement guidance.

6. The response also expressed concern regarding the (at the time) ending of funding for the Sustainable Scotland Network (SSN), and we argued for the value of maintaining this network alongside development of a High Ambition Climate Network (Q2). We agreed that target setting to reach zero direct emissions focused efforts and actions to meet those targets, but noted the difficulties in setting targets that include indirect/Scope 3 emissions, especially for instance emissions from procurement (Q3). Regarding changes to reporting requirements set out in the consultation document (Q7), we agreed with some amendments but not all amendments proposed (please see the University's public bodies climate change report for 2018/19 in the previous SSAG paper):

- We agree with the removal of 1d and 1g, as well as removal of Part 2, which included information that does not necessarily change rapidly for organisations such as universities (and so is repeated year on year)
- We welcome the suggested changes to Part 4, as in its current form the questions overlap and similar information is provided for each
- We question removal of all project data collection (for instance 3f) in the proposal to remove 3e-k. While project data are onerous to gather, providing

such information to Scottish Government provides valuable visibility and possibility to develop case studies for sharing across like institutions

- We are unclear regarding the approach that will be taken to Procurement and the possible removal of Part 5 from this reporting mechanism – if Scottish Government is to stop collecting data in this way, does this mean that procurement reporting will be separated from this climate change reporting. If so, we would not agree with such a change

### **Resource implications**

7. Changes to reporting and the reporting platform used by Scottish Government will mean becoming familiar with a new system, but it cannot be worse than the previous system and annual reporting is already undertaken by SRS (Research and Policy Manager, Climate Change and Biodiversity) as part of regular work in close collaboration with Estates and other departments. Scottish Government has asked for feedback on use of Ecometrica so they are considering a platform that we are already familiar with for our internal data collation and reporting.

### **Risk Management**

8. Public Bodies Climate Change Reports to Scottish Government are made public and so there is reputational risk to not adequately presenting data and narrative answers to sections. There is also legal risk to not completing reports by the 30 November deadline. But these risks are mitigated by collaborative efforts of SRS, Estates and other departments so that reports have been submitted on time and with increasing detail each year.

### **Equality & Diversity**

9. The Climate Change Strategy, Zero by 2040, acknowledges that climate change effects are not equally distributed across urban and world populations, and this is reflected in the report in narrative sections that present the University's whole institution approach to climate change. The PBD climate change reporting is meant to ensure that the public sector is striving to make a fair and necessary contribution to climate change mitigation and adaptation in Scotland, with impact on the rest of the world.

### **Next steps/implications**

10. Next steps include following developments since this consultation closed, engaging with Scottish Government contacts to understand what changes might take place.

### **Consultation**

11. SRS requested input to this consultation response from colleagues across the university, as well as from the SSN.

### **Further information**

#### **12. Author**

Elizabeth Vander Meer  
SRS

#### **Presenter**

Dave Gorman  
SRS

### **Freedom of Information**

13. This is an open paper.

**Annex C – Respondent Information Form**



**Scottish Government**  
Riaghaltas na h-Alba  
gov.scot

*Big Climate Conversation*

**The role of the Public Sector in decarbonising Scotland**

**RESPONDENT INFORMATION FORM**

**Please Note** this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy:

<https://beta.gov.scot/privacy/>

Are you responding as an individual or an organisation?

Individual

Organisation

Full name or organisation's name

Department for Social Responsibility and Sustainability, University of Edinburgh

If you are responding as an organisation, which of the following applies:

public sector body

Is your organisation a 'listed body' (required to report in accordance with the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Order 2015)?

Yes

No

private sector organisation

third sector organisation

Phone number

0131 651 3000

Address

The Boilerhouse, High School Yards, Edinburgh

Postcode

EH1 1LT

Email

elizabeth.vandermeer@ed.ac.uk

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

Publish response with name

Publish response only (without name)

Do not publish response

**Information for organisations:**

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Yes

No



This consultation response has been submitted by the [Department for Social Responsibility and Sustainability \(SRS\)](#) at the University of Edinburgh.

The Department was created in 2014 to understand how the University can work to respond to global challenges including poverty, climate change and the growing demand for energy, food and water. We aim to do this by supporting a culture of change, pursuing excellence and innovation and working collaboratively as part of the local and global community. Our work cuts across scanning, evidence and strategic development; inspiration and communications; operational responsibility and sustainability; links with research, learning and teaching; social responsibility and sustainable governance planning and reporting.

The University of Edinburgh has committed to becoming zero carbon by 2040. The University's Climate Strategy 2016 lays out a comprehensive whole institution approach to climate change mitigation and adaptation in order to achieve ambitious targets.

Evidence cited in this submission has been prepared by staff at SRS in consultation with colleagues across the University.

**Q1. What additional training, information or guidance do you think Public Sector Bodies need to help them increase their action on climate change?**

We welcome development of the Climate Solutions qualification, as it may be useful in embedding climate change thinking further in public bodies through its target of middle and senior managers.

Depending on content of this training, Estates staff in universities and colleges would benefit from information sessions that present innovative, leading edge approaches of climate change mitigation *and* adaptation, in this case on other campuses internationally with exciting examples, to learn from what has been and can be done elsewhere. Sharing of best practice through case studies that are presented in person or as information disseminated via a sector network would inspire and stimulate action. Information sessions or sharing electronically would need to include discussion of initial costs but worthwhile wide-ranging benefits. Training that imparts the need for longer-term views so that short-term cost savings are not the standard in decision-making would be crucial; in many cases innovation is at risk of being shut down by cost factors, both in terms of time and money.

There is a further case for structured programmes of awareness raising and leadership sessions for senior leaders and middle managers across the public sector with the aim of raising awareness of key climate facts and the urgency required in responding; setting out best practice including opportunities for cost savings and risk mitigation; this would show how action on climate change can link to broader objectives on, for example, air pollution, social justice or poverty alleviation.

Community engagement guidance and training that supports successful and sustainable collaborations with community members would also be valuable for Public Sector bodies.

Community engagement guidance and training that supports successful and sustainable collaborations with community members would also be valuable for Public Sector bodies.

On the issue of procurement, we believe procurement guidance is essential and should be supported further in high impact areas on the topic of climate action and climate reduction. At the same time, we believe that this needs to also impact other areas of the commissioning process, including planning permission, the business case process, funding applications, reporting requirements, etc. Sometimes, public procurement is relied upon too heavily to deliver sustainability outcomes, when earlier stages in commissioning or other processes would be more appropriate or procurement influence and expertise is not adequate to ensure the best options are adopted. They would also benefit from guidance that encourages more collaboration across the public sector, including networks of practice that move away from simple “project management” of individual initiatives and helps public bodies articulate how individual projects contribute to shared ambitions on climate. In any case, if guidance is not placed in the right part of the process, is voluntary, or is not supported by funding or other policy incentives, it will not be enacted consistently even when people have the best of intentions. Lastly, project timelines are often not conducive to review and incorporation of the best guidance, which is often complex and highly specialized, e.g., on modern methods of construction or whole life costing, etc.

Q2. What are your views on the proposed structure for the High Ambition Climate Network of Chief Executives and Elected Members?

We welcome the proposal for a high ambition climate network of leaders across public sector and would be delighted to contribute where we can. Leadership is crucial in this area, and mutually supporting networks of high ambition leaders can present opportunities for new areas, reinforcing of existing work and shared learning.

The relationship to existing groups and networks requires careful consideration, as does the remit of the network.

We think the network would have most impact if it acted as a sounding board and forum for assisting Ministers in targeting particular areas for action, for sharing best practice and providing a ‘critical friend’ role for developing policies and programmes, analogous to the role the 2020 climate group undertook for a number of years.

The decision to stop further funding of the SSN Secretariat is surprising and it would be useful to know the reasons for this decision as they have not been stated. SSN connects a wide range of professionals and provides an avenue, through the Steering Group, into government. Establishment of a High Ambition Climate Network appears to replace this, and would only include those public bodies seen to be the most ambitious. This seems to exclude networking across organisations that may be struggling to achieve higher ambition but would benefit from engagement and participation in a Scottish network.

We take the view that the SSN network provides great value, but needs supported by a strong secretariat function. It is widely acknowledged that collaboration and partnership

working across the public sector and with other sectors, will be vital. SSN has played a key role in enabling public sector leadership and collaboration on climate change, and it would be a huge loss not to have SSN as an active part of the new public sector climate change landscape. We would urge the Scottish Government to continue supporting SSN, through support for a funded SSN team/secretariat, even if this requires a new arrangement based on a new SSN delivery programme.

The proposed National Forum on Climate Change is meant to bring together stakeholders across sectors in a manner that would be beneficial based on CCC advice, but a public sector network, to link those organisations facing similar challenges to work through those challenges together, would still have a place in Scotland.

Q3. Do you agree that Public Sector Bodies should be required to set targets for when they will achieve zero direct emissions, and for reduced indirect emissions? Yes / no / don't know  
Please explain your answer.

Yes, we agree that public sector bodies should be required to set targets for achieving zero direct emissions. Such targets focus effort and stimulate clear action to meet these targets. As noted in the consultation document, in some cases the public sector can only make progress dependent on progress elsewhere in society. In the case of reduced indirect emissions, we would suggest greater support from Scottish Government to ensure suppliers to the public sector are able and willing to provide necessary data to report on emissions from procurement, for instance. Support in terms of shared platforms and methodologies across the public sector for calculating scope 3 emissions would be extremely valuable. Target setting for some Scope 3 emissions such as from procurement would be extremely difficult due to current data issues and need to rely on supplier cooperation and input, however target setting for business travel is most likely feasible across public sector organisations due to access to data. Recognition of these differences is important.

There is emerging confusion over the meaning of 'net zero' and we believe there is a need for greater clarity, perhaps in the form of a guidance note, summarising what is intended and explaining best practice.

Q4. Do you agree that Public Sector Bodies should report annually on how they use their resources to contribute to reducing emissions? Yes / no / don't know  
Please explain your answer.

We welcome the suggestion that Public Sector Bodies should report annually on their use of resources as stated. This reporting would ensure that investments are carefully considered in order to contribute to national targets for reducing emissions. University of Edinburgh, for instance, has disclosed in its reporting to Scottish Government investment of £60M into sustainability and low carbon companies as part of our Zero by 2040 climate change strategy; this includes two funds, one investing in companies tackling a wide range of sustainability issues and one investing exclusively in renewable technology. The University has also invested more than £150M in low carbon technology, climate-related research and

businesses that directly benefit the environment since 2010. The University divested from coal and tar sands in 2015, and most recently in 2018 the University committed to transitioning away from investments in fossil fuels by 2021. We believe that these investments and divestments are key to our and other universities' contributions to national targets.

Q5. Do you agree that the details of what Public Sector Bodies are required to report on should be set out in statutory guidance instead of on the face of secondary legislation (otherwise known as an Order)? Yes / no / don't know Please explain your answer.

We agree that the Order should be amended to specify high-level reporting requirements with reference to statutory guidance for detail regarding what is reported by Public Sector bodies, for reasons of efficiency that are stated in the consultation document.

Q6. Do you agree to the proposed changes to the list of Public Sector Bodies that are required to annually report their emissions? Yes / no / don't know If you answered no, please specify which aspect of the proposal you disagree with and why.

Yes we agree with the proposed changes to the list. It makes sense not to include IJBs as they consist of bodies that do not have operational control of estates and it is at this level that reporting should occur. Scottish Forestry and Forestry and Land Scotland are important additions to the reporting list, as nature-based solutions have a significant role to play in emission reductions in Scotland and globally.

Q7. Do you agree with our proposals for amending the reporting requirements as set out above? Yes / no / don't know If you answered no, please specify which aspect of the proposal you disagree with.

We agree with some of the amendments but not with all amendments proposed:

- We agree with the removal of 1d and 1g, as well as removal of Part 2, which included information that does not necessarily change rapidly for organisations such as universities (and so is repeated year on year)
- We welcome the suggested changes to Part 4, as in its current form the questions overlap and similar information is provided for each
- We agree with removal of Part 6
- We question removal of all project data collection (for instance 3f) in the proposal to remove 3e-k. While project data are onerous to gather, providing such information to Scottish Government provides valuable visibility and possibility to develop case studies for sharing across like institutions
- We are unclear regarding the approach that will be taken to Procurement and the possible removal of Part 5 from this reporting mechanism – if Scottish Government is to stop collecting data in this way, does this mean that procurement reporting will

be separated from this climate change reporting. If so, we would not agree with such a change

Q8. Is there anything else you think should be added to the reporting duties, or anything else you think should be removed?

Reporting duties need to be able to develop and expand with changing needs and priorities, for instance to consider the SDGs and National Performance Framework, biodiversity and ecosystem services concerns and approaches, circular economy, procurement, as well as any offsetting activities based on land (sequestration).

Q9. Do you agree that Public Sector Bodies should each make their own report on emissions reductions publicly available? Yes / no / don't know Please explain your answer.

Yes, we agree that Public Sector Bodies should make these reports publicly available for the sake of transparency and ease of access to the information. However, the SSN aggregation of reports is valuable, to have all in one place, but reports need to be more user friendly, accessible via a dashboard that allows for comparisons/some level of analysis.

We also believe public bodies should have more resources and guidance to more accurately report emissions, in particular in regards to how decisions made could impact these figures and measurably reduce carbon impact, and in regards to complex issues like scope 3 reporting. In particular, reporting requirements be robust but achievable, but be structured in a way that incentivizes climate consideration in decision-making, at an organizational and project level.



## Sustainability Strategy Advisory Group (SSAG)

30 January, 2020

### Biodiversity / Adaptation Update

#### Description of paper

1. This paper provides an update on University biodiversity / adaptation actions.

#### Action requested

2. The SSAG is asked to note and discuss the paper.

#### Recommendation

3. The SSAG should note and discuss the paper and provide input to progress the approval of the Biodiversity Policy so that the Biodiversity Strategy can also be officially launched.

#### Background and context

4. An Adaptation Framework for the University of Edinburgh was launched in May 2019 and a linked and updated biodiversity policy and new biodiversity strategy have been written and are awaiting approval. SRS and Estates in collaboration with internal and external colleagues are progressing a number of actions for biodiversity and adaptation. Key projects will be highlighted in this paper. Both action for biodiversity and for adaptation are part of public bodies duties in Scotland.

#### Discussion

***5. Update on projects based on the Natural Capital Standard for Green Infrastructure for biodiversity and adaptation:***

***How Green is Your Campus project (first phase completed in October 2019) – collaboration between SRS, Estates, EDINA, Scottish Wildlife Trust (SWT)***

A key objective of the project has been to improve the student experience by providing greater knowledge of the natural environment around the University campus and improving access to it. Another objective is to provide the University with an easy and convenient method of quantifying how 'green' it is and to identify ways it can make improvements, for biodiversity and climate change adaptation. We have mapped Pollock Halls and Kings Buildings using the app, which is based on the Natural Capital Standard (NCS) for Green Infrastructure developed by the Scottish Wildlife Trust (SWT), to determine GI Factors for each location. Next steps include mapping remaining campus sites, considering additional data layers such as flood risk and heat and using the app to aid in estates development planning. A [story map](#) is available to walk you through the look and feel of the application as developed for our campuses.

***Future Parks Accelerator pilot GI mapping project approved (starting in January 2020) - collaboration between SRS, EDINA, SWT, the Council and other Edinburgh FPA partners***

This pilot project will develop and test a green infrastructure mapping application on four to five park sites in the city of Edinburgh, based on the app created for University of Edinburgh campuses. It will provide a tool for Parks staff use (maintenance/monitoring) while also engaging University students and Edinburgh community groups through citizen science collection of data to populate and test the app and use it in its final form at the end of the pilot. The final app, if taken up, will also be used for Parks interpretation. The Nature, Greenspace and Health 3<sup>rd</sup> year undergraduate cohort this year is participating through living lab projects that support the FPA pilot.

**6. *Hedgehog Friendly Campus Campaign.*** The University of Edinburgh has achieved Bronze accreditation in the Hedgehog Friendly Campus campaign. Estates had been leading this work in collaboration with SRS; we conducted hedgehog surveys at Easter Bush, Pollock Halls and Kings Buildings, fundraised at Pollock Halls, ran staff and student workshops to build hedgehog (and bird and bat) homes and Estates Landscaping has adopted practices to ensure that our campuses are safe for hedgehogs. SRS will lead on the campaign this Spring, working closely with Estates Landscaping to plan to achieve silver accreditation in due course.

**7. *Green Communities Programme.*** Actions that will become part of the Green Communities (Nature and Growing) Programme with the launch of the Biodiversity Strategy are already underway. A permaculture garden has been planned by students near Murchison Building at Kings Buildings and will serve as a pilot during 2020, providing learnings for developing student gardening on campuses. Staff and student nature walks (for plant and bird identifications) are being organised with a SRUC horticulture lecturer and his students (who will lead the walks) to begin in March/April. Most recently, Estates Landscaping, SRS and Prosper have met to discuss options for student legacy trees on University land.

**8. *Biodiversity Policy, Strategy and Adaptation Framework actions.*** Final versions of both the Biodiversity Policy and Strategy are now with Grant Ferguson, awaiting approval. An Adaptation Group has been formed to progress actions laid out in the Adaptation Framework.

### **Resource implications**

9. The Research and Policy Manager (Climate Change and Biodiversity) is able to develop and support projects in the biodiversity and adaptation spaces. Some projects such as expanding GI mapping may require initial increased effort and funding, but would result in greater understanding of risks to the Estate and benefits for biodiversity and student experience.

### **Risk Management**

10. The climate crisis and biodiversity crisis are clearly linked. Climate change mitigation and adaptation measures must also include consideration of biodiversity. There are health and wellbeing, ethical, reputational and legal risks if the University does not act to fulfil duties set out by law in these areas.

### **Equality & Diversity**

11. The Climate Change Strategy, Zero by 2040, acknowledges that climate change effects are not equally distributed across urban and world populations, or species. The University, through its whole institution approach means to make a necessary contribution to climate change mitigation, adaptation and biodiversity in Scotland, with impact and influence on the rest of the world.

### **Next steps/implications**

12. Next steps would include obtaining approval for the Biodiversity Policy and Strategy and ensuring that actions set out in the Adaptation Framework are appropriate and acted upon.

### **Consultation**

13. Biodiversity and Adaptation actions cannot be undertaken without close collaboration between Estates, SRS, other support groups, academics and students.

### **Further information**

14. Author

Elizabeth Vander Meer  
SRS

Presenter

Dave Gorman  
SRS

### **Freedom of Information**

15. This is an open paper.



**Sustainability Strategy Advisory Group (SSAG)**30<sup>th</sup> January 2020**Sustainable Procurement Update****Description of paper**

1. This paper provides an update on sustainable procurement activity led by the Procurement Office and Social Responsibility and Sustainability Department.

**Action requested**

2. The group is requested to review and note the paper.

**Recommendation**

3. To comment only.

**Background and context**

4. 2019 was a busy year for the Procurement Office and SRS Dept on sustainable procurement. Even though UoE sustainable procurement has been embedded for a long time, it is always an iterative, continuous improvement process. Key themes for past year include working with Procurement and SRS towards a more strategic approach, an emerging focus on carbon and climate reduction, and development of collaborative opportunities, including within the Edinburgh and South East Scotland City Region Deal (ESESCRD). Below are some highlights:

**Sustainable Procurement strategic work, external collaboration**

- Procurement Office has formed a new internal sustainability group, with representation from each procurement category (Prof./Campus Services, ICT, Labs, and Estates). This group will develop action plans within and across categories that reflect strategic and policy commitments, research best practice, and most importantly, work together to identify and address the most impactful upcoming projects within the procurement pipeline in advance for each category, coordinating external input when needed.
  - While socio-economic and environmental risks are currently highlighted in advance through use of the Scottish Government's procurement tools for each purchasing sub-category, the actual analysis of procurement sustainability options and courses of action are not always addressed in advance or during planning in a coordinated way, and in some cases, the Procurement Office does not have adequate time to address these issues adequately or to consult with others.
- Consulting with Scottish Government on improvement of sustainable procurement tools and on climate action through procurement as called for in the new programme of government for Scotland.
- This strategic work will hopefully allow more time to be set aside to consider sustainability in big projects with wider input from subject matter experts, at earlier stages, including relevant UoE groups.

### **Sustainable Estates and Buildings**

- Procurement Office to feed into development of ESME estates capital sustainability tool.
- Continue to deliver capital and estates community benefits requirements, fair work and other sustainability measures.

### **Sustainable IT, Ethical procurement and human and labour rights**

- Attended Electronics Watch conference in Dec 2019
- Working to contribute to strategic IS group initiatives as well as SRS led policies on conflict minerals, modern slavery and sustainable IT
- Multiple Prof./Campus category procurement case studies highlighted by Scottish Government and the Scottish Fair Trade Forum as good practice in ethical purchasing (projects led by Antonia Hynd)

### **Climate action, carbon reduction**

- Work with EAUC and HEPA groups other Universities on working groups for plastic packaging, human rights, social value, and climate change and emissions reporting.
- Lead work on developing “zero carbon finance team”
- Team member from procurement office seconded to ECCI to write report on climate action in public procurement for EU EIT Climate KIC.

### **City Region Deal, DDI and Inclusive Growth through Procurement Community Benefits**

- UoE Procurement and DDI have been charged with piloting joint-working inclusive growth procurement approach on behalf of all six partner councils. Have selected two projects, ACF Extension at Easter Bush and EFI at Quartermile. Procurement is coordinating working group for pilot, including Scottish Government, Equate Scotland, DDI, Estate Dept, Council and capital city partnership representation.
- Reporting and monitoring framework being developed with DDI and EI and piloted on Salesforce IRM system to be compliant with DDI reporting framework.
- Identifying opportunities to contribute to DDI initiatives through community benefits supplier offers in non-city deal procurements, to contribute to DDI projects like Data Education for All or Students As Change Agents.

### **Successes**

- Co-lead successful bid for SFC Climate Emergency Grant based around supplier engagement for low-carbon building for £250,000. The aim in part is to leverage procurement relationships to create mutually beneficial networks of practice to push forward low carbon construction within the Edinburgh and Scotland.
- Instigated further supplier ties to Business Development and academic colleagues that lead to several successful R&I joint bids, including on sports clothing and also one on circular construction methods, a £300k Train@ed post-doc.
- Procurement has successfully engaged suppliers in strategic sustainability initiatives for collaboration including DDI Students, DDI Train@ed Fellowship,

and Change Agents and a Circular Economy Hub pilot. SACHA supplier project was recently highlight by the publication Business Insider<sup>1</sup>

- Led successful community benefits negotiations on behalf of QMU and also produced community benefits documentation for the City Region Deal Heriot Watt Robotarium project, in addition to sustainability criteria and inclusive growth community benefits for major CRD projects like Archer 2
- Procurement Office Inclusive growth approach in development in partnership with DDI team has been featured in paper for CRD exec committee, and may inform SG approach for Inclusive growth procurement for all 12 Scottish city region deals in terms of equalities. Procurement office invited to contribute to Scotland's Centre for Regional Inclusive Growth blog.
- Procurement Team highly commended for sustainable procurement at first COUP awards in 2019.
- Engaging UoE students in two current consultancy course to gain 400 hours of student employment to advise Procurement and SRS on reporting indirect procurement carbon emissions and developing a zero net carbon finance team at the University.
- UoE monitoring partner Electronics Watch in 2019 negotiated and secured perhaps the largest worker repayment ever recorded in the electronics industry, on behalf of migrant Myanmar workers in Thailand who had been working under conditions of debt bondage.<sup>2</sup> This provides the clearest validation to date of EW's worker-based monitoring model that links to pressure from public procurement teams.

### **Ongoing issues and risks**

- Capacity constraints within procurement team and support from SRS colleagues mean we are limited for leading action, but current tools are not adequate and strategic development is needed to pull all of the team's great actions into unified narrative. Reporting is a particular challenge. Sustainability is not currently a priority for the Core Systems deployment, but Edinburgh Innovations and DDI have highlighted some resource to help procurement develop community benefits procurement reporting.
- Sustainable procurement covers so many topics, it's difficult for Procurement and SRS to respond to all the complexity, some-times on short notice, e.g., sustainability of specialised markets like IoT sensors, autoclaves or lab consumables, etc. We aim to address this by working more at pipeline in advance, and engaging with end users more strategically through channels like topic-related cross university groups.
- Many activates need to be collaborative with external organisations in order to succeed—we can't afford to "reinvent the wheel" every-time we approach new tasks like CO2 emissions reporting. However, time to collaborate with external organisations is very limited, and not a formal part of most team members role, which may limit progress on complex issues like climate action and ethical procurement. We are trying to solve this by striking the right balance regarding external collaborative activity.

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<sup>1</sup> See: <https://www.insider.co.uk/news/robertson-teams-up-university-edinburgh-21296568>

<sup>2</sup> See: <https://www.reuters.com/article/us-thailand-myanmar-workers-slavery-trfn-idUSKBN1YF03E>

- We need to better communicate our activities on this front, which are diverse, but often not highlighted by ourselves. One aim of our internal sustainability group is to develop business cases and communication as a business as usual activity.
- Procurement team members have a lot of interest in sustainability, but may lack time to develop approaches and work together on more common basis in some cases. Many tasks regarding sustainable procurement may get dropped subsequently. One way to address this is try to focus efforts across categories on key upcoming pipeline spend items, and to focus on the highest priority policies and developments. Another is to engage more at appropriate points with internal colleagues and networks on these issues.

## Procurement General

The University of Edinburgh has complied with its statutory duties under the Procurement Reform (Scotland) Act 2014. The University Procurement Strategy review annually will take account of the new University [Strategy 2030](#).

Performance under the FY2018-19 procurement strategy met expectations in the seven key objectives (with the exception of recognising partial achievements where new system implementation is needed).

Headline results, explained in detail in the APR are:

Value for money £19.6million; Procurement professional influence on £243million (83% of total).

For other staff: new policy on purchasing controls, social responsibility and commercial practice.

Overall Assessment 2019: performance on procurement and commercial improvement plans were assessed (independently) as 80.2% (a 10% improvement on an already high performing team).

Looking ahead, risk management and mitigation and customer support or contract management services will be a focus as well as implementing a new core system for the University to deliver changes.

The University of Edinburgh has published a [University Procurement Strategy](#) for each year and these are approved by the governing body (the Court) and reviewed by the University Executive through its Procurement Risk Management Executives (PRiME), including relevant subsidiary company members.

The University's 2018 procurement strategy was the outcome of consultation and discussion with internal and external stakeholders, who have an interest in our approach to procurement, value for money (balancing cost, quality and sustainability) and our impact for society. This process of review and reporting will inform any adjustments to the procurement strategy deemed necessary to secure future performance improvements and to respond to any economic, political and financial influences to which the University may need to adjust to meet its broader aims and objectives. These are described as impact for society in the FY2018 [University Strategic Plan](#). The University has updated its [Strategy 2030](#) and [Zero by 2040](#) that will be used in future APR reports and procurement strategy reviews.

**All figures are nett of VAT unless otherwise stated.**

Key achievements: Our procurement strategy delivered in Financial Year 2018-19

- **Value for Money** efficiencies of **£19.6million** (*ahead of stretch target £12million*) on a total University procurement activity of around £295million of goods, services and capital works.
- **Influenced<sup>3</sup> 83%** (£243million of procurement activity) with procurement specialists leading, the remainder is locally managed, within agreed core commercial policy process.

### **Discussion**

5. It should be noted that Procurement is undergoing transformation under the SEP program.

### **6. Comments**

None

### **Resource implications**

7. With the SEP program progressing there could be resource restrictions as current priority must be given to Core and SEP.

### **Equality & Diversity**

8. No impact.

### **Next steps/implications**

9. Procurement Policy is being rewritten which will have a focus on sustainable and community benefits.

### **Further information**

10. For further information please contact the author

#### Author

Peter Hayakawa  
Policy Officer  
Procurement

#### Presenter

George Sked  
Joint Director of Procurement

### **Freedom of Information**

11. This paper is open.

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<sup>3</sup> This is as defined in the Act and supporting statutory guidance, see also table 3 for more information

**Sustainability Strategy Advisory Group (SSAG)****Description of paper**

The paper provides an update on energy & utilities strategy priorities and activities at Q2 2019/20 for discussion within the Sustainability Strategy Advisory Group.

**Action requested**

This paper is for information; no advisory group decisions are required.

**Recommendation**

It is recommended the advisory group review and provide verbal comment.

**Background and context**

The paper sets out issues and priorities relevant to utilities infrastructure and performance. These activities support the University Strategic Plan, Estates Strategy, Sustainability Strategy and Climate Change Strategy.

**Discussion****1) Utilities Metering Update**

- a) Metering installations have continued to progress to enable improved building level electricity and heat demand monitoring. Commissioning of new heat and electricity meters at KB and in data centres is scheduled through Q3. This will significantly improve building level energy reporting across high demand sites.
- b) Our renewable energy metering and performance monitoring upgrade is largely complete, with a new information display screen/web portal now designed. Data will go live through Q3.
- c) Data centre performance reporting has been developed for ACF, JCMB and Appleton Tower. A dashboard display will show real time performance (PUE) alongside trends. Meter replacements and commissioning at Appleton and JCMB are complete. Data will go live through Q3.

**2) Energy and Utilities Performance**

- a) Our 2019/20 Q1 Utilities show a 1% favourable total consumption variation against budget. Individually gas is 8% under budget, heat 12% over and combined electricity 6% over. (Appendices 1.b and 1.c)
- b) Our 2018/19 utilities consumption, cost and GHG emissions have been externally verified in the Ecometrica platform for use in our mandatory reporting and EMR submission (Feb 2020). (Appendix 1a)
- c) Our M&T software partner, Optima Energy, have been developing capability to produce updated utility KPI management reports (kWh/m<sup>2</sup>) (£/m<sup>2</sup>) to allow quarterly performance reporting by e.g. Institution, Campus, College, School, Building, Building Type. This development is currently under review by the Energy Office and will be complete in Q3.
- d) Building performance reports for: ACF, Appleton Tower, JCMB, Roslin, SCRM and the School of Chemistry (Joseph Black) are in progress.

### 3) Utilities Finance

- a) A new Utilities Forecast Working Group (UFWG) has been established to monitor and record utilities finance and regulatory risks. Quarterly updates are provided on: budget position; 3 & 10 year budget forecasts; contract/supplier matters; procurement matters; unit rate forecasts; funding matters; campus development; energy projects; energy performance; regulatory compliance.
- b) As noted at UFWG at Q1/P3 YTD net actual utility expenditure was meeting the target with a small favourable variance of 5% (£259k) against the budget. This was made up of a 4% total underspend of £251k and a reduced income of 1% or £8k compared to budget. By Q2/P4 YTD net actual utility expenditure was still meeting the target with a very small variance of 0% (£14k) against the budget. This was made up of a 2% total underspend of £121k and an increased income of 12% or £136k compared to budget.
- c) Wholesale energy costs stabilised during 2019. The Scottish Procurement hedging strategy (advanced volume purchase) continues to reduce the impact of wholesale volatility on UoE gas and electricity rates.
- d) The renewed National Water Services contract has been announced awarded to Scottish Water Business Stream Ltd (SWBS); Wave are incumbent supplier. SWBS will be in place by 1<sup>st</sup> April 2020 until 31<sup>st</sup> March 2023 (potentially 2024)
- e) Work is ongoing to reconcile actual costs, short horizon budgets with longer horizon forecasts to better inform future activities especially the effects of estate changes and energy conservation projects.

### 4) Campus Development / Growth

- a) Information received to date indicates a net increase in GIA (new build, acquisition, and divestment) of ~25,000m<sup>2</sup> p.a. to 2025 (average utility rates) with an increase in expenditure of £500k p.a. (+3% p.a. on the utility budget).
- b) Approximately 100,000m<sup>2</sup> of energy intensive GIA (biomedical research, BRF, laboratory, IT) will be added in 2022. Energy costs will exceed averaged values noted above; additional utility costs could exceed £1M p.a. (6%).
- c) Utility cost increases resulting from new developments (£500k p.a) exceeds anticipated savings derived from energy efficiency investments (~£390k p.a.) at the current rate of investment and delivery.

### 5) Energy Masterplans

- a) The Energy Masterplan explores techno-economic options to deliver a cost effective energy strategy enabling 'smart' energy infrastructure, campus integrated teaching and research opportunities (around energy themes) and a clear 'zero carbon' heat and electricity pathway.
- b) 'Light' and 'Deep' building refurbishment pathways have been scoped for a pilot group of buildings (Chancellors' Court, James Clerk Maxwell Building, Swann Building, 7 George Square, Main Library, Baird / Ewing / Lee Buildings, Sanderson Building, Paterson's Land, Charles Stewart House, Informatics/ Dugald Stewart, Roslin Institute, and SCRM) evaluated for capital cost, energy demand reduction and GHG emissions mitigation.



- c) Buro Happold have updated the building intervention model to align with the university Energy Strategy.
- d) The Energy Masterplan will be complete though early Q3.

## **6) Low Carbon Infrastructure Transition Funding (LCITP)**

- a) The Scottish Low Carbon Heat Funding programme provides up to £5M in matched funding for 'shovel ready' low carbon heat projects. Projects require to be fully commissioned by March 2022 and applications are best suited to existing approved capital projects.

The University prepared two LCITP applications in Q2; the Peffermill Low Carbon Village and the Low Carbon Outdoor Centre at Firbush.

- b) The Peffermill 'Low Carbon' Village proposal set out a sport centre and accommodation development with accelerated sustainable construction standards and low carbon district energy infrastructure. It included: utilization of local waste water to meet heat demand, demonstration of low operating temperatures, accelerated 'low energy' building standards, GHG targets exceeding Building Standards by 30%, and a 'living laboratory' analytics proposal for low carbon smart energy grids. The cost was estimated to be £16.4M (gross) supported by £8.2M in LCITP grant funding.

The benefits include a 43% reduction in GHG emissions (increasing over time) and OPEX reductions increasing from 5% - 15%. The simple abatement cost for the investment was £650/TCO<sub>2e</sub> LT in line with Scottish Government eligible funding criteria. Given a financial payback of 25 years and a need for significant match funding the application was not progressed under the LCITP.

- c) The Firbush Low Carbon Outdoor Centre proposal set out innovative off-grid heat pump technology at Loch Tay. The project includes: the co-location of a local heat source (Loch Tay) with local heat demand in an off gas grid location, demonstration of an innovative low carbon heat pump technology, advanced 'low energy' building standards enabling low temperature secondary heating systems, and a 'living laboratory' for advanced analytics of low carbon smart energy grids, accessible to the local community.

The project cost is estimated to be £713k (gross). An application for £212K has been submitted to the LCITP which has been selected for due diligence. A parallel Renewable Heat Incentive (RHI) application valued at £18k p.a. will be pursued, delivery programme permitting.

A contribution of £287K has been provided from the SCF; all remaining capital cost must be provided from existing capital budgets.

The project application is within formal due diligence by the LCITP team. A decision is expected in February 2020; formal offer anticipated March 2020.

## **7) SFC Financial Transactions programme 2019/20 – 2020/21**

- a) Expressions of interest were sought from the SFC in Q2 to access their £59M financial transaction programme in 2019/20 and 2020/21. This includes a £19M Universities of the Future (UftF) Fund aimed at energy efficiency projects, with a focus on backlog maintenance, improved space quality and student experience.
- b) The SFC have expressed a strong interest in the UoE Energy Strategy and pipeline project portfolio.

- c) The SFC Universities of the Future Fund is a loan, deducted from Outcome Agreement payments at 0.25% interest.
- d) In July 2019 an application to the Universities of the Future Fund was prepared based on the £5.3M 'Deep efficiency' retrofit of the School of Chemistry aimed at halving energy demand. The financial model indicates an NPV of £12M and IRR of 17% while halving energy demand and GHG emissions.
- e) The university declined to submit an application to the UftF loan in 2019/20 to limit exposure to loan obligations. Alternate funding strategies will be proposed in Q3/4 2020/21.

## **8) SFC University Carbon Reduction Fund (UCRF) 2018/19 Update**

- a) The £5.19M SFC UCRF fund is fully allocated across 29 projects.
- b) Performance: Savings £614k p.a. and 2,098 TCO<sub>2</sub>e p.a. SBP 8.7 yrs.
- c) Current spend is £1.5M with a further £825k committed.
- d) A main contractor for the £3M solar farm has been appointed. A funding strategy for the extension of the private wire and district heating main, to improve the site OPEX benefits is, ongoing.
- e) See Implementation Report 2019' for comment and status of individual projects.
- f) Monthly deductions of £61,808.45 from Outcome Agreement support run to July 2026.

## **9) Sustainable Campus Fund Update**

- a) The £4.75M Sustainable Campus Fund (SCF) is partially allocated (£2M) across 72 projects. Actual spend is currently at £998k.
- b) Performance: Savings £384k p.a. and 1032 TCO<sub>2</sub>e p.a. SBP 5.1 yrs.
- c) A strategy review for the SCF is in progress, with a desire to re-profile Energy Strategy priorities to 2025 aligned to the Energy Masterplan. Areas under discussion include:
  - i. SCF Project Support Priorities
    - Energy Masterplan – Enabling pilot work
    - Low Carbon Heat – Increased focus on gas / heat
    - Pilot / validation projects – Inform scalable CFI development
  - ii. Increase Spend Rate - double recurring SCF allocations
  - iii. Proposed new capital fund to support deep efficiency projects.
- d) Re-profiling of SCF spend, under discussion:
  - i. Planned Maintenance
    - Reactive lighting works (£30-50k p.a.)
    - Rolling services insulation programme (£200k p.a.)
  - ii. Sustainable Campus Fund\_(£2 – 3M p.a.)
    - Lab Equipment / Freezer Fund (£200k p.a.) (SRS programmes)
    - Recurring Sustainable Campus Fund

- DHN Optimization – Atkins appointed (HR) completion Q4
- Building LTHW control optimization - Atkins appointed (HR) completion Q4
- Data centre cooling (ventilation control) – Tender in progress, completion Q4
- Lab ventilation (ventilation control) – Appointment pending, completion Q4
- Sustainability Innovation Support (SRS programmes)

## 10) Pipeline Projects Update

- c) Priority pipeline projects exceed £21M with estimated annual savings of £2.3M and 7,000 TCO2e.
- d) To support the Energy Strategy a forward spend profile of £2.5M p.a. has been profiled against laboratory equipment upgrades, ventilation upgrades (labs and data centres), LED lighting and heat network optimization to 2025. This is supported by increased planned maintenance funding allocated to Energy Strategy priorities.
- e) A suite of high value / low risk capital projects has been profiled at £5-10M per annum, requiring additional /external funding support. Funding routes for larger value Energy Strategy projects will continue be presented through 2020,
- f) Pipeline ‘energy efficiency’ projects prioritized within the Energy Strategy include:

Project	Capital Cost (£)	Savings (£ p.a.)	Savings (TCO2e)	SBP (yrs)	NPV (£)	IRR (%)
Easterbush HV/DHN extension	£6 M	£550k	2,100	9	£8M	11%
School of Chemistry ‘Deep efficiency’	£5.3 M+	£500k	1,500	11	£12M	17%
Swann Lab Ventilation Upgrade	£450 k	£80k	200	8	£1.9M	24%
LED lighting upgrade. Phase 2.	£1.1 M+	£160k	200	9	£3.5M	21%
LED lighting upgrade. Phase 3 / 4	£2.5 M+	£160k	200	10	TBD	TBD
Appleton Tower Data Centre Upgrade	£500 k	£400k	875			
JCMB Data Centre Upgrade	£500 k	TBD	TBD			
Easterbush Freezer Farm	£1.0 M+	£50k	500			

### Resource implications

Energy and utilities strategy actions are being delivered through agreed budgets. The realisation of additional operating benefits will be driven by capital funding availability.

### Risk Management

Institutional risks and mitigating actions are contained in the Energy Strategy Risk Register, reported via the Utilities Forecast Working Group (UFWG). Risks are broadly focused around the following themes:

1. University Strategic Targets – failure to achieve net zero GHG emissions by 2040.
2. Operating Cost – escalating annual energy costs, escalating GHG emissions cost.
3. Environmental Impact - Increasing GHG emissions; reliance on fossil fuels.

4. Regulatory Reporting – failure to manage and report energy and emissions input/output.

Delivery risks include:

1. Internal capital funding – energy efficiency investments are funded largely through capital contributions to the Sustainable Campus Fund. Project performance is evaluated in terms of £/TCO<sub>2e</sub>, NPV, ROI and simple payback. The capital cost of prioritized projects exceeds the available funding.

Maintaining the existing level of annual operating cost reductions and GHG mitigation will require additional access to capital funding from 2019/20.

Accelerating the realisation of identified operating cost benefits will require a step change in funding allocation and project delivery.

2. Access to external funding – enabling a step change in building/network energy performance, and enabling the integration of low carbon heat technologies, requires significant capital funding support. Low interest loans are likely to continue to be made available through Scottish Government programmes, but at a pace, schedule and scale out with university control.

## **Equality & Diversity**

Equality and diversity requirements are monitored within Energy and Utilities Strategy; an Equality Impact Assessment is not deemed necessary at this stage.

## **Next steps**

The Head of Energy & Utilities will take forward actions proposed by the SSAG and collaborate as required with relevant stakeholders. Actions are recorded in the Energy Strategy Action Plan.

## **Consultation**

The content of this paper has been reviewed by the Director of Estates Operations. Information related to the Sustainable Campus Fund performance has been reviewed by the Utilities Working Group. Information related to the Utilities Finance Working Group has been reviewed by the Heads of Estates Operations and Estates Finance.

## **Further information**

Information requests should be directed to Dean Drobot, Head of Energy & Utilities.

## **Author & Presenter**

Dean Drobot

Head of Energy & Utilities, Estates Department

02 October 2019

## **Freedom of Information**

This is an open paper.

## Appendix 1 & 2

## 1.a Summary of Utilities with Annual Variations

Consumptions	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
Year	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh
14/15	146543	56130	202673	69019	39951	86549	126499	0	154	251802
15/16	138414	50374	188788	62529	41207	88614	129821	890	151	243778
16/17	131549	42891	174440	65643	31303	99996	131299	148	138	240132
17/18	141696	51350	193046	71907	30740	100734	131474	150	150	262166
18/19	157046	47736	204781	68437	35977	88650	124626	150	150	253169
%Change 14/15 to 15/16	-5.5%	-10.3%	-6.9%	-9.4%	3.1%	2.4%	2.6%		-1.9%	-3.2%
%Change 15/16 to 16/17	-5.0%	-14.9%	-7.6%	5.0%	-24.0%	12.8%	1.1%		-8.7%	-1.5%
%Change 16/17 to 17/18	7.7%	19.7%	10.7%	9.5%	-1.8%	0.7%	0.1%	1.5%	8.7%	9.2%
%Change 17/18 to 18/19	10.8%	-7.0%	6.1%	-4.8%	17.0%	-12.0%	-5.2%	0.0%	0.0%	-3.4%
%Change 14/15 to 17/18	-3.31%	-8.52%	-4.75%	4.18%	-23.06%	16.39%	3.93%		-2.59%	4.12%
Change 14/15 to 17/18	-4847	-4780	-9626	2888	-9211	14185	4974		-4	10364
Emissions	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
tonnes CO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2	tCO2
14/15	27107	10382	37489	2895	0	42777	42777	0	33	83194
15/16	25468	9269	34737	1560	0	36513	36513	246	32	73089
16/17	24226	7899	32125	2554	0	38441	38441	41	30	73191
17/18	26066	9446	35513	1312	0	30945	30945	40	32	67843
18/19	28873	8776	37649	1297	0	23889	23889	39	32	62906
%Change 14/15 to 15/16	-6.0%	-10.7%	-7.3%	-46.1%		-14.6%	-14.6%		-1.9%	-12.1%
%Change 15/16 to 16/17	-4.9%	-14.8%	-7.5%	63.7%		5.3%	5.3%		-8.7%	0.1%
%Change 16/17 to 17/18	7.6%	19.6%	10.5%	-48.6%		-19.5%	-19.5%	-1.4%	8.7%	-7.3%
%Change 17/18 to 18/19	10.8%	-7.1%	6.0%	-1.1%		-22.8%	-22.8%	-4.3%	0.0%	-7.3%
Cost	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
£	£	£	£	£	£	£	£	£	£	£
14/15	£3,498,650	£1,620,764	£5,119,414	£2,286,686	£3,861,097	£7,339,010	£11,723,274	£0	£21,000	£15,651,723
15/16	£3,466,967	£1,370,306	£4,837,273	£2,239,977	£4,439,007	£8,685,720	£13,124,728	£12,000	£20,000	£16,756,011
16/17	£2,062,413	£1,146,385	£3,208,798	£2,279,951	£3,286,086	£9,753,360	£13,039,447	£12,000	£20,000	£16,486,783
17/18	£2,532,609	£1,134,541	£3,667,149	£2,679,242	£2,829,231	£10,358,096	£13,187,328	£13,000	£24,000	£17,169,754
18/19	£3,169,741	£1,159,721	£4,329,462	£2,144,148	£4,010,529	£9,905,438	£13,915,967	£13,000	£24,000	£17,505,373
%Change 14/15 to 15/16	-0.9%	-15.5%	-5.5%	-2.0%	15.0%	18.4%	12.0%		-4.8%	7.1%
%Change 15/16 to 16/17	-40.5%	-16.3%	-33.7%	1.8%	-26.0%	12.3%	-0.6%		0.0%	-1.6%
%Change 16/17 to 17/18	22.8%	-1.0%	14.3%	17.5%	-13.9%	6.2%	1.1%		20.0%	4.1%
%Change 17/18 to 18/19	25.2%	2.2%	18.1%	-20.0%	41.8%	-4.4%	5.5%		0.0%	2.0%
%Change 14/15 to 17/18	-27.61%	-30.00%	-28.37%	17.17%	-26.72%	41.14%	12.49%		14.29%	9.70%
Change 14/15 to 17/18	£-966,042	£-486,223	£-1,452,265	£392,556	£-1,031,866	£3,019,087	£1,464,054		£3,000	£1,518,031
Cost per Unit	EC Gas	Non EC Gas	Total Gas	Heat	EC Electricity	Grid Electricity	Electricity	Gas Oil	LPG	Total
£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh	£/kWh
14/15	£0.0239	£0.0289	£0.0253	£0.0331	£0.0966	£0.0848	£0.0927	£0.0000	£0.1364	£0.0622
15/16	£0.0250	£0.0272	£0.0256	£0.0358	£0.1077	£0.0980	£0.1011	£0.0135	£0.1324	£0.0687
16/17	£0.0157	£0.0267	£0.0184	£0.0347	£0.1050	£0.0975	£0.0993	£0.0812	£0.1450	£0.0687
17/18	£0.0179	£0.0221	£0.0190	£0.0373	£0.0920	£0.1028	£0.1003	£0.0867	£0.1600	£0.0655
18/19	£0.0202	£0.0243	£0.0211	£0.0313	£0.1115	£0.1117	£0.1117	£0.0867	£0.1600	£0.0691
%Change 14/15 to 15/16	4.9%	-5.8%	1.4%	8.1%	11.5%	15.6%	9.1%		-2.9%	10.6%
%Change 15/16 to 16/17	-37.4%	-1.7%	-28.2%	-3.0%	-2.6%	-0.5%	-1.8%		9.5%	-0.1%
%Change 16/17 to 17/18	14.0%	-17.3%	3.3%	7.3%	-12.3%	5.4%	1.0%		10.4%	-4.6%
%Change 17/18 to 18/19	12.9%	10.0%	11.3%	-15.9%	21.1%	8.7%	11.3%		0.0%	5.6%
%Change 14/15 to 17/18	-25.14%	-23.48%	-24.80%	12.46%	-4.77%	21.26%	8.23%		17.32%	5.36%
Change 14/15 to 17/18	£-0.0060	£-0.0068	£-0.0063	£0.0041	£-0.0046	£0.0180	£0.0076		£0.0236	£0.0033

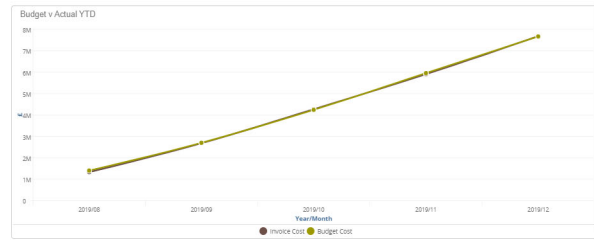
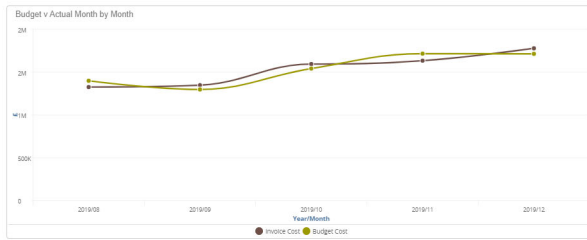
## 1.b Summary of 2019/20 Q1 Utilities with Budget Variations

Supplier	Invoice kWh	Budget kWh	Inv-Bud kWh	Inv - Bud %	Number of Invoices in Analysis (1/Mth)
EDF ENERGY - ELEC	22,793,900	19,932,162	2,861,738	14%	3,483
TOTAL GAS & POWER - GAS	41,428,751	45,142,905	-3,714,155	-8%	314
UoESCo Cool	3,000		3,000		2
UoESCo Elec	6,490,400	7,600,250	-1,109,850	-15%	12
UoESCo Heat	11,607,480	10,392,451	1,215,029	12%	12
	Σ 82,323,531	Σ 83,067,769	Σ -744,238	{ } -1%	# 5

### 1.c Summary of 2019/20 Q1 Electricity with Budget Variations

Supplier	Invoice kWh	Budget kWh	Inv-Bud kWh	Inv - Bud %	Number of Invoices in Analysis (1/Mth)
EDF ENERGY - ELEC	22,793,900	19,932,162	2,861,738	14%	3,483
UoESCo Elec	6,490,400	7,600,250	-1,109,850	-15%	12
	<b>Σ 29,284,300</b>	<b>Σ 27,532,412</b>	<b>Σ 1,751,888</b>	<b>{ } 6%</b>	<b># 2</b>

### 1.d Summary of 2019/20 Utility Budget Variations

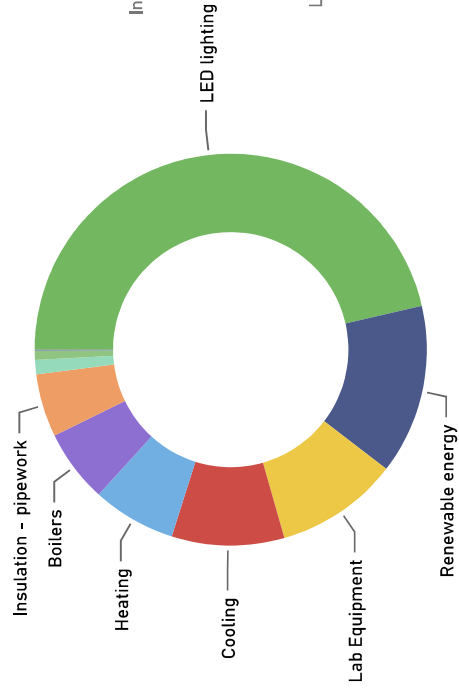




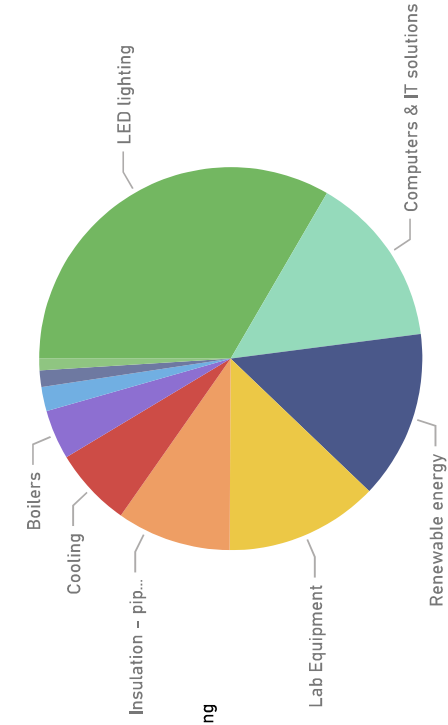
## University of Edinburgh Sustainable Campus Fund

Project Type	Count of Project Type	Total CAPEX	SCF Award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/annum]	Savings GHG [LT TCO2]	£ / TCO2e LT
Heating	1	£135,000	£60,200	17.1	£7,900	26.9	767	£176
Cooling	3	£181,400	£155,666	11.0	£25,700	62.2	889	£676
LED lighting	38	£909,426	£864,757	8.1	£128,216	444.8	11,106	£3,709
Boilers	4	£118,384	£118,384	7.7	£16,035	85.0	921	£535
Renewable energy	2	£274,200	£274,200	7.1	£54,600	84.7	1,432	£355
Lab Equipment	17	£199,298	£184,571	6.6	£49,703	115.7	987	£1,118.38
Lighting controls	3	£15,100	£15,100	4.9	£3,730	14.2	126	£505
Insulation - pipework	1	£102,000	£102,000	2.8	£37,000	179.0	4,028	£25
Computers & IT solutions	1	£22,686	£22,686	0.4	£56,000	0.0	0	£0
Ventilation	1	£1,530	£1,530	0.3	£5,360	19.7	591	£3
Lab Ventilation	1		£138,635					
<b>Total</b>	<b>72</b>	<b>£1,959,024</b>	<b>£1,937,729</b>	<b>7.5</b>	<b>£384,244</b>	<b>1,032.1</b>	<b>20,846</b>	<b>£1,124.3</b>

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type



MAC (£/TCO2e LT)

**£94**

Simple Payback

**5.1**

Funding Source

SCF

Status

Select all

Complete

Onsite

Part Complete

Pre-Contract

Status	Count of Status	Total CAPEX	SCF Award
Complete	39	£879,566	£742,435
Onsite	19	£801,224	£917,820
Part Complete	2	£51,159	£51,159
Pre-Contract	12	£227,075	£226,315
<b>Total</b>	<b>72</b>	<b>£1,959,024</b>	<b>£1,937,729</b>

## Scottish Funding Council Universities Carbon Reduction Fund 2018/19

Project Type	Count of Project Type	Total CAPEX	SFC award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	£ / TCO2e LT
Renewable energy	2	£3,245,505	£3,245,505	8.0	£316,673	1,080.2	24,305	£208
LED lighting	15	£1,185,495	£1,185,495	9.7	£116,845	408.6	10,216	£1,563
Transformers	1	£376,884	£376,884	4.5	£83,035	283.2	8,497	£44
Lab Ventilation	1	£277,610	£138,975	8.4	£33,000	130.0	1,334	£208
Ventilation	1	£14,040	£14,040	0.8	£17,940	104.0	1,067	£13
Computers & IT solutions	1	£49,658	£49,658	4.0	£12,341	42.1	758	£66
Lab Equipment	5	£129,127	£104,627	4.1	£31,602	41.3	498	£5,202
Motor controls	1	£8,976	£8,976	6.6	£1,364	4.7	48	£188
Lighting controls	1	£3,300	£2,950	2.4	£1,392	4.8	42	£78
Building management systems	1	£64,800	£64,800	0.0	£0	0.0	0	£0
<b>Total</b>	<b>29</b>	<b>£5,355,395</b>	<b>£5,191,910</b>	<b>7.1</b>	<b>£614,193</b>	<b>2,098.9</b>	<b>46,764</b>	<b>£7,570</b>

MAC (£/TCO2e LT)

**£115**

Simple Payback

**8.7**

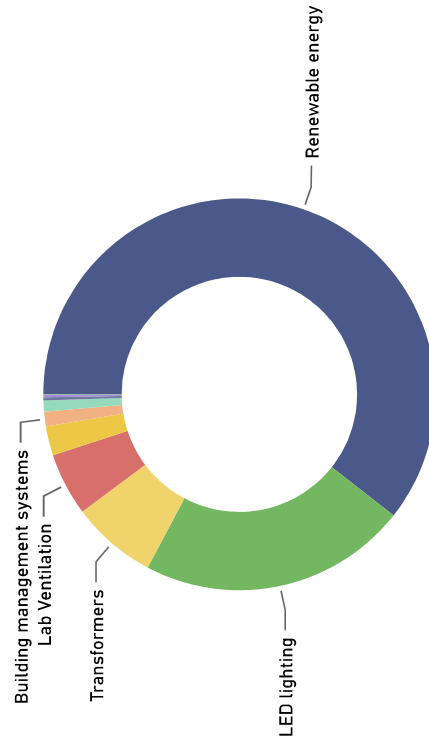
Funding Source

■ SFC UCRF

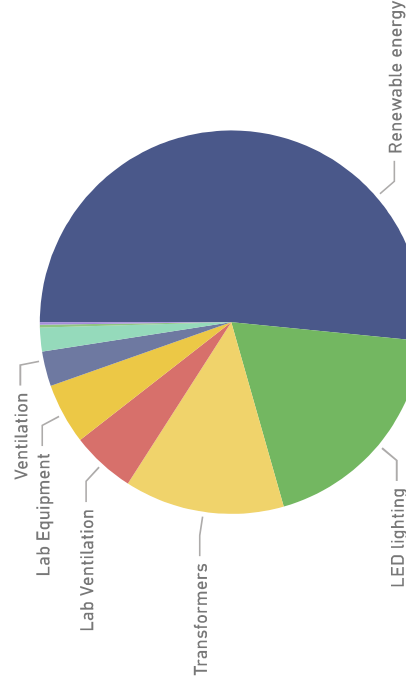
Status

- Select all
- Complete
- Onsite
- Pre-Contract

Total CAPEX by Project Type



Savings Cost [£/annum] by Project Type

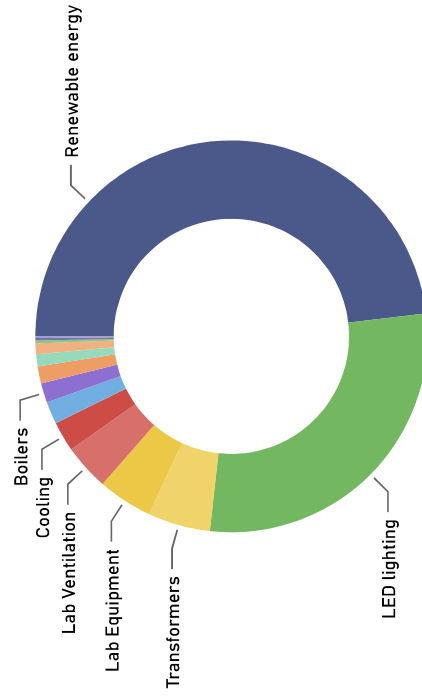


Status	Total CAPEX	SFC award
Pre-Contract	£3,245,505	£3,245,505
Onsite	£1,344,768	£1,206,133
Complete	£765,122	£740,272
<b>Total</b>	<b>£5,355,395</b>	<b>£5,191,910</b>

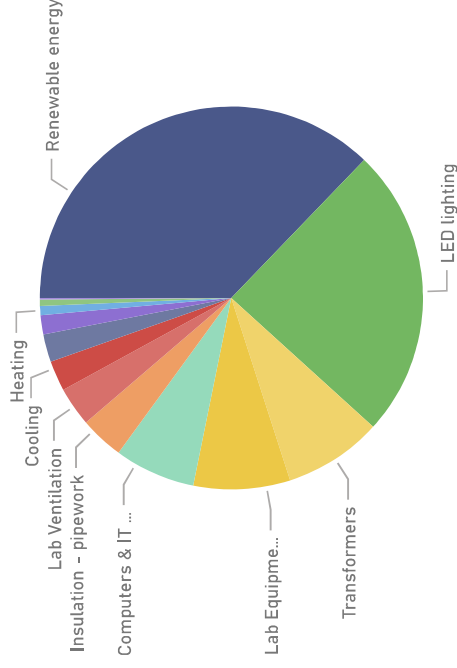
## University of Edinburgh SCF & SFC UCRF

Project Type	Count of Project Type	Total CAPEX	SCF Award	SFC award	Average of Simple Payback	Savings Cost [£/annum]	Savings GHG [TCO2/ annum]	Savings GHG [LT TCO2]	Median of £ / TCO2e LT
Building management systems	1	£64,800		£64,800	0.0	£0	0.0	0	£0
Ventilation	2	£15,570	£1,530	£14,040	0.5	£23,300	123.7	1,658	£8
Insulation - pipework	1	£102,000	£102,000		2.8	£37,000	179.0	4,028	£25
Computers & IT solutions	2	£72,344	£22,686	£49,658	2.2	£68,341	42.1	758	£33
Transformers	1	£376,884		£376,884	4.5	£83,035	283.2	8,497	£44
Lighting controls	4	£18,400	£15,100	£2,950	4.3	£5,122	19.0	168	£103
LED lighting	53	£2,094,921	£864,757	£1,185,495	8.6	£245,061	853.5	21,321	£104
Boilers	4	£118,384	£118,384		7.7	£16,035	85.0	921	£153
Renewable energy	4	£3,519,705	£274,200	£3,245,505	7.5	£371,273	1,164.9	25,737	£157
Heating	1	£135,000	£60,200	£79,900	17.1	£7,900	26.9	767	£176
Motor controls	1	£8,976		£8,976	6.6	£1,364	4.7	48	£188
Lab Ventilation	2	£277,610	£138,635	£138,975	8.4	£33,000	130.0	1,334	£208
Cooling	3	£181,400	£155,666	£25,700	11.0	£25,700	62.2	889	£210
Lab Equipment	22	£328,425	£184,571	£104,627	6.0	£81,305	157.0	1,485	£406
<b>Total</b>	<b>101</b>	<b>£7,314,419</b>	<b>£1,937,729</b>	<b>£5,191,910</b>	<b>7.4</b>	<b>£998,437</b>	<b>3,131.0</b>	<b>67,609</b>	<b>£117</b>

### Total CAPEX by Project Type



### Savings Cost [£/annum] by Project Type



MAC (£/TCO2e LT)

**£108**

Simple Payback

**7.3**

Funding Source

- SCF
- SFC UCRF

Status

- Select all
- Complete
- Onsite
- Part Complete
- Pre-Contract

Status	Count of Status	Total CAPEX	SCF Award
Complete	51	£1,644,688	£742,435
Onsite	34	£2,145,992	£917,820
Pre-Contract	14	£3,472,580	£226,315
Part Complete	2	£51,159	£51,159
<b>Total</b>	<b>101</b>	<b>£7,314,419</b>	<b>£1,937,729</b>



**Sustainability Strategy Advisory Group (SSAG)**

**30 January, 2020**

**SRS Programmes Report**

**Description of paper**

The purpose of this paper is to update SSAG members on SRS Programmes 2019/20. It includes reporting to end of Q1 and some additional notes for Q2.

**Action requested**

SSAG are asked to discuss and provide comments. In addition, members are asked to consider if, within their own sphere of influence, they can encourage further participation or action in programme areas.

**Background**

We have continued to progress work against 7 priorities: carbon and energy savings; resource efficiency; supply chain SRS; responsible investment; localised advice and projects; community engagement and links to learning and teaching. We facilitate and manage programmes to catalyse action across the University and undertake work to support assessment and management of risks and opportunities. See

[https://www.ed.ac.uk/files/atoms/files/srs\\_department\\_strategy\\_digital\\_low\\_res.pdf](https://www.ed.ac.uk/files/atoms/files/srs_department_strategy_digital_low_res.pdf)

Staff can access project reports and summarise on the Project Management website here:

<https://www.projects.ed.ac.uk/portfolio/srs>

We review our outcomes, outputs and inputs on a quarterly basis. The University measures performance in relation to carbon; energy; waste and recycling and other material sustainability issues. The purpose of this reporting is to be transparent and accountable on how the programmes of work facilitated and managed by the department are performing in relation to the strategic ambitions of the University.

**Discussion**

*Annex 1 and 2 contain our Quarterly Report Summary Table and Infographic*

**Student and Staff Engagement.**

Staff students around the University are contributing to university targets around zero carbon and zero waste. Sustainability training and the framework of Sustainability Awards for offices, labs and residences as well as our networks and champions are all contributing to build capacity in this area. The launch of the new university Strategy 2030 with a pillar of Social & Civic Responsibility and a commitment to the SDGs has helped to spark new interest from different parts of the University on what they can be doing.

- The [Sustainability Awards](#) have drawn new interest from around the University by offices and labs who are looking for tools and approaches to implement actions in their areas. 45 staff teams worked towards a mix of Bronze, Silver and Gold Awards, and 24 student residences. 35% of University staff are now reached by the Sustainability Awards. A comprehensive evaluation was undertaken last year but we are reviewing criteria for future alignment and embedding sustainability.

- We launched a new [Sustainability Champions](#) network in Q1 to capitalise on growing interest in sustainability from staff and students. At the end of Q1 there were 219 staff and 155 student champions with new sign ups continuing. This new network replaces the Energy Coordinator and Waste Coordinator networks and will give the University community lots of practical advice on how to be more sustainable both here and at home.
- 129 staff and 167 students completed our online '[Be Sustainable](#)' induction course in this quarter, pledging 1799 individual actions between them.
- 35 staff undertook our [Be Sustainable Advanced](#) course to gain a more in-depth understanding of how to affect change at work and at home. A new cohort started in January 2020 with c50 staff.
- 90% of departments now include some element of sustainability in staff inductions.
- 116 staff have completed our [Modern Slavery training](#) to date.
- We continue to work to increase sustainability in the curriculum: 59 students are currently taking one of our three [Student Pathways](#) on climate change, circular economy or the SDGs. We're also assisting with 4 student dissertations. A PhD intern is undertaking a mapping exercise to look at the SDGs in the curriculum.

## Energy engagement

- 85 projects in total have now been approved to receive funding from the [Sustainable Campus Fund](#), estimated to bring annual savings of over £557,000 and 1,700 tCO<sub>2</sub>e.
- We prepared engaging communication materials for our annual [Winter Shutdown campaign](#), which encourages all University staff and students to switch off lights and equipment in order to save energy over the winter break.

## Sustainable Travel

- 87 institutions from 20 countries have now joined our [Roundtable of Sustainable Academic Travel](#) in order to work together to tackle rising emissions from business travel in the Higher Education sector.
- We have completed initial research looking at how the University of Edinburgh can reduce its carbon emissions from business travel and also encourage climate-conscious travel. This work is feeding into a University committee to develop next steps.

## Resource Efficiency and a Circular Economy

- We continue to promote the reuse of items via the waste and reuse portal (Warp It), which saved almost £28k in Q1, resulting in 887kg of items being reused instead of disposed of.
- 402 pcs were refurbished and reused through our IT Reuse Project, with 58% being distributed to the local community through our reuse partner, and 42% being reused internally within the University.
- Our #ZeroWasteUoE campaign continues to inspire staff and students across the University to reduce their waste and has been enthusiastically championed by Sports And Exercise.
- At the beginning of the semester, disposable cup use crept up again due to the influx of new students and visitors. We continue to work closely with UoE Cafés to encourage customers to buy and use a reusable cup in order to avoid our latte levy, now raised to 30p.

## **Fairness in Trade and Sustainable Procurement**

- We refreshed our Good Food Policy (forthcoming) and continued with the Make ICT Fair project. Support was provided for sustainable procurement with enhanced sustainability requirements and guidance for Stationary Supplies and Labs Consumables tenders. Make ICT Fair research continued. The University's Modern Slavery statement was updated and through committees but further work on supply chains and purchasing practices needs to be progressed to improve impact in this area.

## **Community Engagement**

- The Community Engagement Programme ([Edinburgh Local](#)) opened another round of Community Grant applications with awards in Q2. Since 2017 we've provided more than £180,000 to over 40 incredibly worthwhile community projects across the Edinburgh City Region.
- 26 students are taking part in the [Digital Ambassadors project](#).
- We continued to explore new ways to make social investments, particularly with social enterprises.

## **Sustainability at the Festival**

- We evaluated the success of our [Festival Sustainability Hub](#) and continue to collaborate with Edinburgh Fringe, Fringe Venues and local community organisations on how to make the 2020 Fringe even more sustainable.

## **Risk Management**

The Department has recently reviewed and updated its risk register. Key risks relate to the response to the climate emergency; sustainable (business) travel; SRS in supply chains and community engagement. Mitigation in place and being actively reviewed and updated.

The growing interest across a range of sustainability issues and the need to achieve impact while working with the same resources, provides an opportunity for us to think differently and smarter about how we deliver programmes. As we develop our next plans, we will be working with others to better support embedding sustainability across functions, schools, departments and units rather than taking on new initiatives.

## **Equality & Diversity**

Due consideration has been given to equality and diversity. We will continue to monitor issues within our programmes.

## **Next steps/implications**

The Department is currently updating its strategy for 2020. The University has recently launched a new Strategy 2030 with a commitment to Zero Carbon and the Sustainable Development Goals. The wider University SRS Plan is to be reviewed in light of this as well.

## **Consultation**

This report has been based on team and programme and project specific reports. Quarterly output and outcome reports are prepared for senior management and shared with other interested stakeholders.

## **Further information**

Prepared by: Michelle Brown, Deputy Director of Social Responsibility & Sustainability and Head of SRS Programmes

**Freedom of Information** This is an open paper.

## SRS Department Internal Reporting

### SUMMARY (November 2019)

Period: 1st Quarter 19/20 Prepared by Head of SRS Programmes for Director of SRS (more detailed reports available on specific areas)

Priority Themes	Sub Theme Programme Name	Related Department Indicators (BOLD = CSG Critical Success Factors)	Department Targets for 2020	2019/2020 Progress at end of Q1
Carbon and Energy	<a href="#">Climate Policy and RELCO</a>	<ul style="list-style-type: none"> <li>- Standards for new development</li> <li>- Agreed approach to renewables/offset</li> <li>- <b>Co2 &amp; energy targets</b></li> </ul>	<ul style="list-style-type: none"> <li>- Development standards agreed and in use</li> <li>- Renewable and offset strategy and targets agreed</li> </ul>	Continued increasing stakeholder interest in response to Climate Emergency during quarter. A series of events were organised in September to coincide with the Climate Strike day. Over 200 participated. Social media messages reached over 80k. Biodiversity policy awaiting sign off and confirmation of next steps. Adaptation actions in progress. Further work planned with Estates on taking forward building development standards. Scottish Government mandatory carbon reporting to be completed in November along with internal University reporting.
	<a href="#">Energy Engagement &amp; Communications Programme</a>	<ul style="list-style-type: none"> <li>- <b>Contribution to Co2 &amp; energy targets</b></li> <li>- <b>SCF performance</b></li> <li>- <b>#active champions</b></li> <li>- Visibility of materials around campus + External awards for Energy and Carbon</li> </ul>	<ul style="list-style-type: none"> <li>- <b>1.8 M savings identified for 10 Percent target</b></li> <li>- <b>675k annual savings through SCF by 2018</b></li> <li>- <b>300 active Energy Coordinators by 2020 and SWITCH materials visible in every location by 2019</b></li> </ul>	Reported in 2019 on £1.8M savings identified for energy saving target. Sustainable Campus Fund contributes to this: 85 projects now approved and c£2.5M now allocated (including c400k contribution from Scottish Funding Council). Approved projects estimated to bring annual savings of over £550k and 1700tCO2e. Close to target identified and some projects were moved over to Scottish Funding Council. Pipeline of opportunities in development. Work on prioritisation of future projects delayed in Q1. Energy coordinators project closed to merge into wider 'Sustainability Champions' network. Engagement team working with Energy office to support finalisation of Energy Masterplan and prioritising work with Estates Development on future opportunities. Winter energy saving campaign developed but unlikely to be visible in every location.
	<a href="#">Sustainable Laboratories Programme</a>	<ul style="list-style-type: none"> <li>- Sustainable Travel: reduction CO2 BAU</li> </ul>	<ul style="list-style-type: none"> <li>- 300 pledges for sustainable travel and 600tCO2e p.a saved</li> </ul>	Project to promote pledges for sustainable travel and school specific engagement closed in order to support further leadership development and agreement on university next steps. The remit of the Travel and Aviation Working Group is to put forward recommendations to the University's Senior Leadership team on actions the University should implement in order to reduce emissions from business travel across the Institution. A wider 'Visions for Change' event was organised with academic and business panellists to discuss views around air travel for work and the carbon impacts. We have continued to work with others around the world to look at business travel opportunities. The Roundtable of Sustainable Academic Travel network has grown to 125 members, from 87 different institutions or organisations, in 20 different countries. Amber as original targets and plans for reduction in emissions due to business travel were not possible. Change of project and new targets to be confirmed.
Resource Efficiency	<a href="#">Resource Efficiency and Circular Economy Programme</a>	<ul style="list-style-type: none"> <li>- <b>Active users, money saved and waste avoided through Reuse</b></li> <li>- <b>Active staff champions</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>1000 active users by '19 and 500k saved via Warp-it</b></li> <li>- <b>50 active coordinators</b></li> <li>- Circular Economy Innovation Hub Network active</li> </ul>	Interest in waste is another key issue for both students and staff with growing desires to eliminate single use plastics and other items. #ZeroWasteUoE campaign reached new audiences (with Sports & Exercise and ACE). We supported the EUSA 'Zero Waste Shop' in DHT. SRS continues to work with ACE and EUSA and Waste on opportunities to reduce single use items and promote reuse. 37% decrease in disposable cup use between 2017/18 and 2018/19. 50% are still being sold in disposable cups. The IT Reuse Project resulted in over 400 items reused in quarter (c58% with our community partner The Remakery on Leith Walk). SRS/EI continue to lead the development of the business case for the new CE Innovation Centre. Progress is on track with the current planning assumption that the Centre will be formally established in summer 2020.
Supply Chain SRS	<a href="#">Fairness in Trade and Sustainable Procurement Programme</a>	<ul style="list-style-type: none"> <li>- <b>Categories SPPT assessment has been completed</b> # of suppliers engaged with on SRS issues #of positive changes in supply chains as a result of engagement (direct or via partnerships EW). % staff with purchasing resp taken steps to increase their knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>5 prioritised categories complete and issues raised embedded in procurement process 50% of spend suppliers engaged.</b></li> <li>- Reporting of positive changes in supply chains as result of our work. 100% research needs identified through SPPPTs addressed. 100% critical issues identified through SPPPTs addressed -80% purchasing staff engaged reached</li> </ul>	Good progress made in the area of sustainable procurement (a combination of forward planning as well as advising on specific projects). Upcoming Stationary Supplies and Labs Consumables tenders will have enhanced sustainability requirements due to guidance provided by SRS. Make ICT Fair required more than 10 percent of allocated programme manager time this quarter and will likely continue to require an increased time investment over the next quarter order for the University to deliver on Work Package objectives which means some other planned projects may be further delayed. Modern Slavery statement updated and through committees but further work on supply chains and purchasing practices needs to be progressed to improve impact in this area. Good Food Policy updates somewhat delayed but will be completed in Q2. A project to progress review of palm oil supply chains was delayed (supplier audits).
Responsible Investment	<a href="#">Responsible Investment</a>	<ul style="list-style-type: none"> <li>- Contribution to Responsible Investment</li> </ul>	<ul style="list-style-type: none"> <li>- Positive programme in place by 2019</li> <li>- <b>Annual PRI reporting and minimum of 'B' on benchmarking</b></li> </ul>	Although early days for investments, our social investments returned 2.7% against a treasury return of 1%. A draft social enterprise and social investment strategy was approved by University Executive and Investment Committee, and is on track to be approved by Court by end 2019. Work finalised by investment committee consultants to review our own investments in relation to the Task Force on Climate Related Financial Disclosure (TCFD). PRI Reporting to progress in Q2.



<b>Awards and Learning &amp; Development</b>	<a href="#">Awards Programme</a> <a href="#">Be Sustainable (training)</a>	<ul style="list-style-type: none"> <li>- staff in office, lab awards as percentage</li> <li>- effectiveness of project grants</li> <li>- Internal benchmarking <b>Staff inductions include SRS at UoE 100%</b> Staff L&amp;D opportunities</li> </ul>	<ul style="list-style-type: none"> <li>- % of staff participating in office, lab awards % of student residences and students participating</li> <li>- Internal benchmarking developed trialled, <b>100 % staff inductions include SRS</b> Staff L&amp;D opportunities</li> </ul>	The Sustainability Awards continue to draw new interest from around the University by offices and labs who are looking for tools and approaches to implement actions in their areas. 45 teams signed up for 19/20 (29 Offices and 16 Labs). 129 Staff and 167 Students completed the online 'Be Sustainable' induction in the first quarter with c1800 pledges for sustainable behaviours made. 35 people participated in Be Sustainable Advanced delivered with Learning for Sustainability Scotland, and preparations for the next course are in progress. With the launch of the University's new Strategy 2030 and social and civic responsibility, we see interest from leadership teams across the University for inductions and training on the global Sustainable Development Goals.
<b>Community/ Public Engagement</b>	<a href="#">Community Engagement Programme</a>	<b>People reached and awareness; Income generated; Active volunteers (staff and students);</b> Local school partnerships; Support provided through grants; Student pathways; community of practice	<b>100k people to be reached and 90% awareness (increase from 66% in 2014); 750k income generated; 6k staff and student volunteers active;</b> all state schools partnerships; 150k disbursed through community grants; 100 students co-curricular pathways	Progress across some projects took place in the quarter while a few areas have had to 'pause' due to stretched capacity with the Programme Manager on sick leave during the quarter. 26 (active) Digital Ambassadors have been delivering support for and training for community members in simple digital skills. 'Elderly Learners' attendance up 150% from last year due to increased advertising. Access to Rooms Project made progress with rooms and booking process confirmed. Getting the Terms & Conditions compiled and approved has been a complex process. In total, we have allocated £185,000 to Community Grants since December 2017. For q2 November round we received requests for c£283k worth of funding, with c£25k to allocate. We will explore opportunities for matched funding in Q2. See video: <a href="http://www.youtube.com/watch?v=9LdZmGsgshs">www.youtube.com/watch?v=9LdZmGsgshs</a>
<b>&amp;</b>	<a href="#">Student Experience, Learning and Research</a> <a href="#">Events and Outreach</a>	<ul style="list-style-type: none"> <li>- Student learning opportunities for SRS</li> <li>- Researcher &amp; Practitioner Living Labs for Programmes</li> <li>- Academic Participation in Programmes</li> <li>- <b>Reach of communications campaigns and events</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>10 % of staff and 15 % of new intake students reached</b></li> <li>- Uni SRS Standards (NUS Erasmus) Project successful</li> <li>- Quintuple digital presence from 2014 baseline</li> <li>- Living Lab toolkit in place</li> <li>- <b>5000 people annually in SRS events</b></li> </ul>	A series of student engagement initiatives were launched following a more targeted welcome week, this included the Sustainability Champions, Student Pathways, Sustainability Awards for Residences and the Student Project Grants. After three years, the ESSA Project came to an end, with the department contributing towards the final project evaluation and supporting the delivery of the OERs in this quarter. Building on the success of the Student Pathways project whereby 50 students completed their Edinburgh Award on Climate Leadership or the SDGs we are now working to develop further opportunities for the Circular Economy. A PhD intern is undertaking a mapping exercise to look at the SDGs in the curriculum. The Festival Sustainability Hub was a key project in the last quarter of the year. This has helped to ensure there is a visible sustainability presence at the Fringe and provide a focal point for collaboration with partners on sustainability. An intern has been further investigating plastic waste and collaborative opportunities to address this. A review of our other events support is currently being undertaken. Close to 3000 people attended our events in the last year. Following the decision to no longer support the Our Changing World events we have focussed on other opportunities for student engagement for semester 1.
<b>Strategy and Reporting</b>	-	<ul style="list-style-type: none"> <li>- SRS Reporting on time and to required standard Items to committees get approval</li> <li>- Good Food Policy Implementation Plan</li> </ul>	<ul style="list-style-type: none"> <li>- <b>SRS Strategy signed off by 2018</b></li> <li>- Annual Report signed off by committees</li> <li>- Actions taken as per Food Policy Implementation Plan</li> </ul>	Work continues to improve our annual reporting, content has been shared with Finance for the Annual Report and Accounts and work has started on the THE Impact Rankings submission. SRS Committee has agreed plans to update and agree new SRS Plan as the plan for delivering 'Social & Civic Responsibility' in the Strategy 2030. Work around the Living Lab has slowed down until staff resource is in place. Significant amount of time across the department to feed into updates to Dept Strategy.
<b>Our People, Systems</b>	-	<ul style="list-style-type: none"> <li>- IIP level. Staff L&amp;D Strategies.</li> <li>- Funding and Income.</li> <li>- Fit for Purpose Office</li> </ul>	<b>In place by 2017 (target of Silver).</b> 100% staff have L&D plans aligned to strategy. <b>£100k raised by 2020 for Dept and 500k for SRS in general.</b> New office location during 2017	Small working group convened to review opportunities to bring Department Values to life in our work day to day. Agreement to pursue the Investors in People Health & Well-being Award.  Opportunities for funding and consultancy reviewed and some activities progressed. SRS led the development of a £250k bid in response to SFC's Climate Emergency Call.
<b>Leadership &amp; Partnership</b>	-	<ul style="list-style-type: none"> <li>- Partnerships developed. Active thought leadership demonstrated. International peer review and exchange.</li> </ul>	At least 5 academic papers published by 2020. International conference and peer review/exchange options reported on.	With a small grant from the ISCN and off the back of a previous visit, we supported capacity building in the Pontificia Universidad Católica de Chile as they develop their sustainability programmes in response to their Zero by 2038 climate strategy. We continue to work with networks and leaders across sectors. Russel Group Universities Sustainability sub-group was formed in Semester 1 and the EAUC launched a sector 'climate commission'. University of Edinburgh shortlisted for 7 'Green Gown' Awards.

## General Comments on Progress

### Outputs and Outcomes highlighted in accompanying infographic

Progress made across all programmes and projects in the first quarter. Working with others to meet carbon and energy targets, increase reuse and recycling, support integration of social and environmental impacts within procurement and investments, deliver community engagement programme with partners. Reactive and unplanned but priority work has continued to slow down progress in some areas. In the first quarter of 2019/20 we launched a new staff and student sustainability champions network to support sustainability leadership and action across the University.

Priorities in 2019/20 are focussed on supporting the University's response to the Climate Emergency, continuing to progress carbon, waste and energy savings, working to enhance our social impact near and far (through our Community Engagement and Social Finance as well as SRS in Supply Chains work) and enhancing our support for the student experience.

The integration of the Sustainable Development Goals, local community commitments and Zero by 2040 in the University's new strategic plan are providing significant opportunities to enhance the University's positive impact. A Court Seminar was held on 30<sup>th</sup> September in relation to the Climate Emergency and the SDGs. Significant rise in requests (welcome but challenging).



£4.75m Sustainable Campus Fund  
£2.5m allocated to date on low carbon and energy saving projects since 2016



1,700 tCO<sub>2</sub>e savings  
85 projects approved



£557,400 cash savings  
Combined payback of 6 years



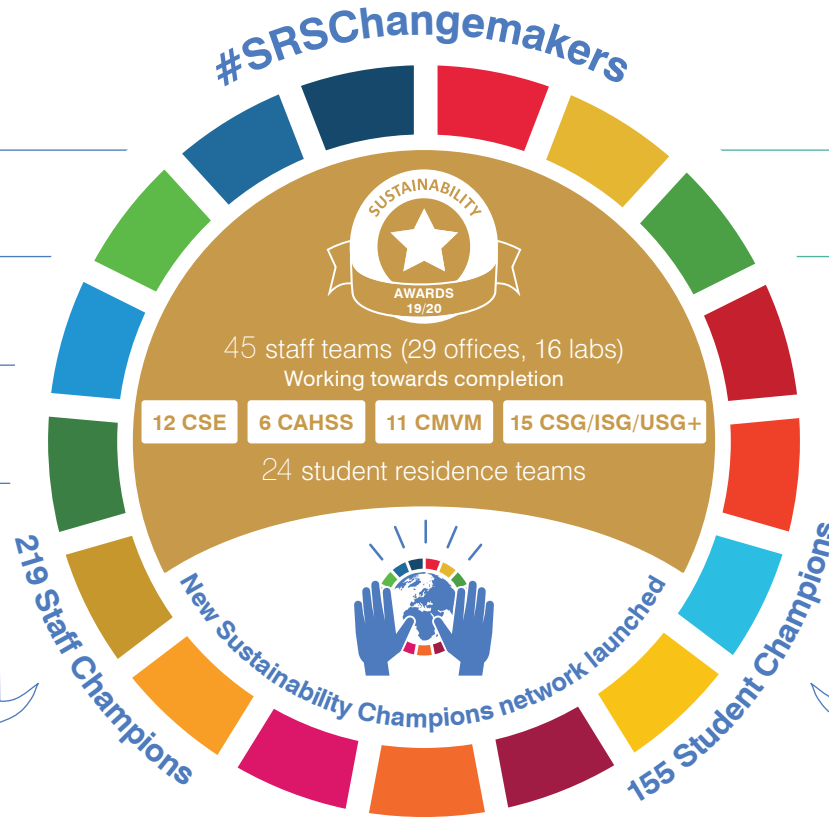
Energy saving campaign  
Preparing materials for winter shutdown



Business Travel and Aviation Analysis  
87 institutions from 20 countries in the Roundtable of Sustainable Academic Travel

"Really enjoyed the launch and am hoping to help spread the sustainability message amongst colleagues as much as possible"

"...there was a lot of good opportunity for us to let you know our ideas but then there was not much about what you will do with them or what happens next"



Waste and Reuse  
Expanding reuse around the University



£27,816 cash savings in Q1  
887kg waste avoided in Q1



402 PCs reused in Q1  
42% internal reuse, 58% community reuse



Targeting single use items  
37% single use coffee cup reduction in 2018/19



#ZeroWasteUoE campaign  
Targeting staff / students around the University

"I cannot recommend getting involved with @Edsust initiatives enough. I learnt so much from doing it. With their guidance, help and support we worked with residents to make positive changes across our UG & PG accommodation sites."

Advanced blended course: 35 staff

35% of staff reached by Awards



90% of departments include sustainability in staff inductions

116 staff completed Modern Slavery training

129 staff trained  
167 students trained

1,799 pledges

Edinburgh Award Pathways: 59 students

4 SRS Dissertations

8 Student Project Grants

26 active student Digital Ambassadors

Positive social impact near and far



Make ICT Fair Research



Good Food policy supported



Fairtrade Accrediation (2 stars)



47 community projects and partnerships



£185,000 community grants



£1.5m committed with Big Issue Invest



34,671 web visitors (over 50% new)  
1,412 subscribers / 1033 Twitter  
550 Instagram / 350 Facebook