

Review Report
Sustainability Awards

Prepared by Alistair Soutter



THE UNIVERSITY
of EDINBURGH



Social Responsibility
and Sustainability



Executive Summary

The Sustainability Awards aim to recognise staff and students who contribute towards the University of Edinburgh becoming more socially responsible and sustainable and provides toolkits and criteria for action. The Awards have been in place since 2010, and became part of the services of the Department for Social Responsibility and Sustainability (SRS) when it was established in 2013. Within the SRS Department plan 2016-2020 states a commitment to undertaking a review of this programme in 2018. This review report has been undertaken to fulfil this commitment and presents the findings and results of research undertaken to evaluate, understand what works best, lessons learned, and to make recommendations on the next steps.

A review was conducted of the offices, residences, and labs at multiple levels. Most people felt the awards and sustainability were relevant. It was felt that the awards are effective at encouraging sustainability and providing a useful framework. The current auditing process is universally praised. Although there were a few suggestions the current online materials and online submission process is seen as effective and efficient. There did seem to be an initial hurdle to overcome with the online process, but it was a major improvement over the older system. Whilst the criteria were mostly seen as effective, it was found that case studies were lacking for criteria as well as clarity on the gold awards. Senior figures undertaking the awards felt they were effective at recognising the contribution towards them, middle and bottom levels of the University (technicians, resident assistants, and students) felt like this could be improved. Workshops, programmes, and the SRS staff have been very helpful, engaging, and great at spreading sustainability. The impact of the awards has been seen across all areas of the University, although is felt less by students. The awards do seem to provide continuing value and promoting sustainability, however there are areas of improvement. Overall though the awards are an effective tool for promoting sustainability and should be continued and developed to further sustainability throughout the University, and to award such practices.



Table of contents	
Executive Summary	2
Table of contents	3
Introduction	7
Aims and Scope	7
Literature	9
Surveys and Interviews	12
Residences	12
Methodology	12
Results	13
Residents	13
Recycling/Bins	14
Building and Resources	15
Energy	15
Communication and Engagement	16
Knowledge	16
Evaluation	17
Solutions	17
RAs	17
Relevance	17
Effectiveness	18
Efficiency	18
Impact	19
Legacy	19



<u>Wardens</u>	20
<u>Relevance</u>	20
<u>Effectiveness</u>	21
<u>Efficiency</u>	22
<u>Impact</u>	22
<u>Legacy</u>	24
<u>Non-participants</u>	25
<u>Discussion</u>	25
<u>Relevance</u>	25
<u>Effectiveness</u>	26
<u>Efficiency</u>	28
<u>Impact</u>	29
<u>Legacy</u>	30
<u>Outcome Objectives</u>	32
<u>Offices</u>	34
<u>Methodology</u>	34
<u>Results and Discussion</u>	34
<u>Relevance</u>	34
<u>Effectiveness</u>	36
<u>Efficiency</u>	38
<u>Impact</u>	39
<u>Legacy</u>	40
<u>Online survey</u>	42
<u>Limitations</u>	42



<u>Outcome Objectives</u>	43
<u>Labs</u>	47
<u>Methodology</u>	47
<u>Results</u>	48
<u>Heads of Labs</u>	48
<u>Relevance</u>	48
<u>Effectiveness</u>	49
<u>Efficiency</u>	51
<u>Impact</u>	51
<u>Legacy</u>	53
<u>Non-Participating Labs</u>	54
<u>Technicians</u>	55
<u>Relevance</u>	56
<u>Effectiveness</u>	58
<u>Efficiency</u>	58
<u>Impact</u>	59
<u>Legacy</u>	60
<u>Discussion</u>	60
<u>Relevance</u>	61
<u>Effectiveness</u>	62
<u>Efficiency</u>	64
<u>Impact</u>	65
<u>Legacy</u>	66
<u>Outcome Objectives</u>	68



<u>Recommendations for the Future</u>	72
<u>General</u>	72
<u>Residences</u>	76
<u>Offices</u>	76
<u>Labs</u>	77
<u>Conclusion</u>	79
<u>Reference List</u>	81
<u>Appendix A: Residence Awards Questionnaire</u>	83
<u>Online Survey</u>	83
<u>RA Interview</u>	90
<u>Warden Interview</u>	92
<u>Warden Survey</u>	94
<u>Appendix B: Residence Awards Questionnaire</u>	99
<u>Heads of Office Interview</u>	99
<u>Heads of Office Survey</u>	100
<u>Appendix C: Residence Awards Questionnaire</u>	103
<u>Heads of Lab Interview</u>	103
<u>Heads of Lab Survey</u>	105
<u>Technician Survey</u>	109



Introduction

Aims and Scope

The goals of the Sustainability Awards programme are to encourage and recognise all University of Edinburgh staff and students for meaningful action taken on social responsibility and sustainability through providing tools and support to encourage best practice and celebrate efforts. The Social Responsibility and Sustainability Department (SRS) have set eight outcome objectives that it wishes to achieve with the Sustainability Awards, these are as follows:

1. By 2020 15% of staff to participate through an office or lab awards
2. By 2020 20% of staff reached through exposure of those participating
3. Awards continue to have value
4. By 2020 have 20 residence sites participating
5. 10 student awards expanded and reached each year
6. 5 special awards to staff each year, with engagement of senior management
7. Dissertation and other related prizes
8. Maintain links with green impact appropriate to University business needs, setting up, and running “Engaging Edinburgh Through Green Impact”

As part of the SRS Department plan 2016-2020 a commitment was made to undertake a review of the Sustainability Awards in 2018, carrying out an evaluation and to make recommendations on outcomes, impact, and lessons learned and make recommendations for the future. This review will examine how and whether the current awards meet or are on track to meet to the outcome objectives outlined above. Furthermore, a detailed review of the relevance, effectiveness, efficiency, impact, and legacy of the separate categories of the Sustainability Awards will be conducted. These five areas will cover

1. Relevance: Is the right thing being done? How important is the relevance or the significance of the Sustainability Awards regarding University and sustainability priorities?
 - a. The University has clarified its long-term vision of becoming a net zero Carbon University by 2040 and is working to update its wider social responsibility and sustainability strategy. How do the awards inspire and support action across the University, which is relevant to University

strategies? This evaluation should review the relevance of the programme in relation to the University strategy and the wider context (environmental and social issues: climate change, human rights) and make recommendations.

2. Effectiveness: Are the objectives of the Sustainability Awards being achieved? How significant is the effectiveness or impact of the programme compared to the objectives planned?
 - a. The department strategy notes that across various SRS issues we will ensure that staff are supported with the awareness, knowledge and skills to contribute to SRS in their areas of work and that efforts are celebrated and encouraged. The awards programme has continued to provide tools, support and encourages best practices for taking practical action around the University and to celebrate efforts. This evaluation should review effectiveness of the programme and make recommendations.
3. Efficiency: Are the objectives being achieved economically by the Sustainability Awards? How big is the efficiency or utilisation ration of the resources used?
 - a. The engagement team within the department manages the programme which involves time from various staff members. The communications team supports the marketing of the programme and the underlying system used to track progress. The delivery has been continuously reviewed to look for and implement efficiencies. There may be further opportunities which this review can help with. This evaluation should review efficiency of the programme and make recommendations
4. Impact: Do the Sustainability Awards contribute to reaching higher level sustainability objectives? What is the impact or effect of the Sustainability Awards in proportion to the overall situation of the target group or those effected
 - a. The programme is able to clarify the outputs achieved in terms of numbers of participants and whether participants have signed up to activities or committed to taking actions related to sustainability priorities at the University. Due to systems in place it is less easy to attribute action to impact (i.e. because a team member did 'x' this led to a carbon reduction...). This evaluation should review sustainability impacts of the programme (with specific links to the climate strategy and other SRS goals) and make recommendations.

5. Legacy: Are the positive effects or impacts lasting? How is the permanence of the intervention and its effects to be assessed?
 - a. The Sustainability Awards have run since 2010. It would be interesting to learn if those teams who participated in the early years (or more recently) continued to participate and whether the benefits of participation were sustained in terms of positive environmental or social outcomes. This evaluation should review the legacy impacts of the programme and whether benefits can be sustained after the life of the programme and make recommendations.

Literature

This review will consist of a general review supported by literature that broadly assesses the relevance, effectiveness, efficiency, impact, and legacy of Sustainability Awards in a university setting, as well as a specific interview and survey-based analyses of the separate branches of the Sustainability Awards. For this brief review of the literature, research was collected on Sustainability Awards in other university settings.

Since the 1990s there has been a surge in higher education institutions signing up to the sustainability charters and declarations (Lambrechts & Ceulemans, 2013), in particular with the UN's decade of Education for Sustainable Development (Leal Filho, Gonclaves, Pereira, & Azeiteiro, 2012). Higher education institutions like universities are important drivers in sustainability, as they have a direct impact through their existence and operation on the environment, but also an indirect one through the research and educational output they provide (Lang, 2015). This role of universities is widely recognised (Corcoran & Wals, 2004; Disterheft, Caerio, Azeiteiro, & Leal Filho, 2013; Lauder, Sari, Suwartha, & Tjahhono, 2015; Lukman & Glavi, 2007; Thomashow, 2014). Sustainability assessment, such as an awards system, is seen as having the potential to bring change in large organisations to a more sustainable future (Lambrechts & Ceulemans, 2013; Ramos & Pires, 2013). There are numerous sustainable award systems with one of the most widely used, at least in North America, is the Sustainability Tracking Assessment and Rating System (STARS).

The STARS system is like the Edinburgh Sustainability Awards in that it contains multiple levels of achievement, of which varying levels of criteria are required to achieve



these awards (Wigmore & Ruiz, 2010). Furthermore, it is a rating system and not a ranking system. A rating system is effective over a ranking system as it provides clear benchmark levels of attainment rather than purely whether one is more sustainable than another, which has been found to be more effective at promoting change due to clear levels of sustainability needed (Wigmore & Ruiz, 2010). Despite this, the ranking system does allow some benefits, as it provides a metric to stakeholders on the quality of universities (when the ranking is between universities), which can have consequences for competitive funding (Lauder et al., 2015). Thus, these aspects of the award should be kept, whilst a ranking system would allow teams to compare themselves, it should not be adopted over clear benchmarks of sustainability. However, the STARS system does include baseline indicators and assessments of sustainability, something that the current awards lack. This has allowed the STARS system to show significant improvement in sustainability from baseline that has come with participation (Lang, 2015). Without suitable indicators and instruments to monitor levels of sustainability (e.g., plastic waste, electricity) the current awards are unable to measure their impact in such a concrete way. Furthermore, this lack of concrete data makes it difficult to set goals and measure progress (Kamal & Asmuss, 2013).

The ISO (2010) recommends that an initial focus of a sustainability system is placed on those who are most receptive to sustainability, to demonstrate what social responsibility means in practice. This is to ensure that initial efforts are focussed on areas of the University that are likely to participate. This has the benefits of initial resources being used as effectively and efficiently as possible, rather than targeting areas that are unreceptive and would require a greater investment. The current awards are achieving this effectively by making the awards process a voluntary one, whilst promoting it around the University, with those teams that have signed up initially being the most receptive areas. This has allowed the awards to start off well, with increasing spread throughout the University as its benefits become apparent.

One way of measuring sustainability compliance and achievement is through audits. This system is built into the existing award structure, as well as others. At the University of Edinburgh these audits are primarily conducted by students. Research supports this effort by stating that not doing so is a missed educational opportunity. And further, it is appealing to students as it entrusts them in a position where they are able to act as agents of change and collaborators in their university's goal to be more sustainable (Davey, 2016). Although students can be seen as having a strong vision and provide valuable insightful input, they can

be a potential hindrance. This is primarily when it comes to issues that students might not be aware or knowledgeable about (e.g., staff development plans; Lambrechts & Ceulemans, 2013). Lambrechts and Ceulemans further suggest that the quality of the audit depends largely on the auditor, highlighting the importance and necessity of effective training. Overall though audits provide students with an engaging and proactive opportunity to put into practice research and data collection skills and can be effective as a teaching opportunity (Davey, 2016). Even discussion and research on existing projects has been seen to be a good tool for students in labs to receive greater insight on sustainability in practice (Cann, 1999).

The ISO (2010) recommends that attention be focused on senior management within a university, demonstrating to them the implications and benefits of social responsibility and sustainability. Other research supports such a notion (White, 2014). However, it is often found that both senior administrators and students are identified as change makers (Helferty & Clarke, 2009). Top-down processes have been shown to be effective across a number of institutes and organisations as they have the support of the resources that senior management can provide. Similarly bottom-up approaches have also been successful as they build support for new initiatives and place pressure for change (Brinkhurst, Rose, Maurice & Ackerman, 2011). However, these processes do face their challenges (see Brinkhurst et al., 2011). Although this focus on senior management and students is recommended, it ignores one key aspect of the running of universities, and that is the middle level of university management, i.e. faculty and staff (Brinkhurst et al., 2011). It is suggested that this middle-out approach can be effective at balancing the lack of institutional knowledge and lack of comprehensive vision that students might have with the distance from day-to-day operations that senior management might have (Brinkhurst et al., 2011). Although this approach does face its challenges as well, this research demonstrates the importance of examining and focussing on all levels of the University and not just one.

In summary, it appears that awards systems are an effective tool at encouraging sustainability when implemented properly. They provide opportunities for students and staff at making changes to their university in a more sustainable manner. It is important that such awards provide clear benchmarks of achievement, as well as effective measuring systems of concrete changes in sustainability. This measurement system alongside effective auditing is important in measuring the success of such initiatives. It is important to target initially areas that are most receptive to change, and to focus on all levels of operation. Thus, this review



will examine whether the auditing and measurement systems in place at the University of Edinburgh are sufficient. This review will also attempt to focus and gather information from the top, middle, and bottom of the University to assess whether the awards are working, and where improvement is needed.

Surveys and Interviews

Residences

Methodology

As discussed above, this project aimed to assess all three levels of the Sustainability Awards for residences, these being students (who form the bottom), resident assistants (RA; who form the middle), and wardens (who form the top). By reaching and assessing all three levels this project aims to understand the relevance, efficiency, effectiveness, impact, and legacy of the awards for the students who form the majority of those affected, for resident assistants who run and organise many of the initiatives set out by the awards programme, and the wardens who choose to and oversee the entire accommodation's commitment to the awards. In order to do this a series of interviews and surveys were conducted, as well as looking at those sites that participated and didn't.

To assess the students' experience of sustainability and the awards at their accommodation a mass survey was sent out to all students staying at accommodation sites managed by the University in the 2017/2018 period, with the assistance of the accommodation office, to all accommodation sites, in early June. This survey was left open until the end of August and received 125 responses. This survey was completed online, and a full list of the questions can be found in Appendix A.

To assess the resident assistants' experience interview invitations were sent out (randomly selected from postgraduate sites), a one-on-one interview with the resident assistant who responded was conducted. Invitations were sent to some of the residence sites (randomly selected from postgraduate sites) who had not participated, but none responded. This was a semi-structured interview with the structured questions found in Appendix A.

Lastly, to assess the wardens, invites were sent to both undergraduate and postgraduate sites, these were chosen to get a mix of award levels, and of those that are

privately owned or University owned. These were one-on-one semi-structured interviews with the structured questions found in Appendix A. Three interviews were conducted with wardens at participating sites. An online survey was also sent out to wardens who did not participate (as none responded to a request for interview), this online survey was completed by 3 wardens. The questions for this survey can be found in Appendix A.

Results

The results of these above interviews and surveys will now be discussed broken down into their level of assessment. All quantitative data was assessed with R, whilst all qualitative data was assessed using NVIVO 11.

Residents

As stated 125 residences completed the survey to varying levels of completeness. These residents covered 18 sites, with Holyrood being the most represented (42 responses), and 10 sites having less than 5 responses. In regards to being aware whether their site had participated 75 (66%) of participants indicating they did not now, with a further 11 (10%) indicating maybe, which overall shows that 75% of residences were unaware of their sites participation. Of the 25% of residences who were aware the majority were correct (86%). Awareness of the SRS department was low at only at 43 individuals (38%) indicating they were aware of the department, and awareness was even lower for the awards themselves, with only 36 individuals (32%) knowing about them. Students were asked whether they believed the awards recognise student actions towards sustainability, with 47 (41%) believing that they do. In regards to the impact one's accommodation had on the environment 32 individuals (38%) said it has a good impact on the environment, compared to 20 (24%) who believe it had a bad impact on the environment, with the rest being in between. The majority of students though stated that they were more likely to choose an accommodation that had won an award (55%), with 15 participants (17%) saying they would not, the rest being in between. Future sustainability was high with 74 individuals (86%) stating they were likely to be more sustainable in the future, and with 26 individuals (31%) believing their accommodation had made a significant impact on their sustainability behaviour, with 42 (49%) indicating their accommodation had not.

Participants were also asked how effective their accommodation was on a few different metrics which primarily focussed on the different categories of the awards. Participants rated

their answer on a scale of 1 (very effective) – 4 (not effective at all) with an option of I don't know. An overall average effectiveness score was found to be ineffective ($M = 2.77$, $SD = 0.83$), which meant 55% found their accommodation ineffective. A breakdown of the specific criteria found that:

- Achieving the goals of the Sustainability Awards (Effective 71%, $M = 2.25$, $SD = 0.87$)
- Communicating and getting you and others engaged with sustainability (Effective 49%, $M = 2.70$, $SD = 1.06$)
- Supporting you and others with resource efficiency (Effective 47%, $M = 2.65$, $SD = 0.97$)
- Supporting you and others travel more sustainably (Effective 36%, $M = 2.91$, $SD = 1.14$)
- Supporting you and others save water and energy (Effective 44%, $M = 2.81$, $SD = 1.08$)
- Supporting mental health and wellbeing (Effective 65%, $M = 2.24$, $SD = 1.01$)
- Informing me of the Sustainability Awards (Effective 25%, $M = 3.21$, $SD = 1.03$)
- Involving me in the Sustainability Awards (Effective 21%, $M = 3.35$, $SD = 0.97$)
- Being Sustainable (Effective 51%, $M = 2.51$, $SD = 0.96$)

Lastly, the survey contained a qualitative component in which participants were asked two questions. The first question asked residents if they had any comments on the sustainability of their accommodation, which was answered by 34 students. The second question asked residents if they had any comments on the Sustainability Awards, which was answered by 15 residents.

In regards to the first question asked of residents, 4 broad themes were identified. These being Recycling/Bins, Building and Resources, Energy, and lastly Communication and Engagement. These themes will now be discussed:

Recycling/Bins

One theme that emerged was in regards to recycling systems and bins. One aspect that was mentioned within this theme quite consistently was issues with the bin system, in particular that recycling bins had restricted openings, which people believed discouraged recycling efforts. Building on this aspect there appeared to be quite a divide on how

widespread the recycling system was, this was split between accommodations, with some accommodation sites reporting excellent recycling resources (e.g., Holyrood) whilst other sites had issues with certain types of recycling missing (e.g., Buccleuch and Mylnes court). Another aspect that was split was the knowledge/information provided by accommodations on how recycling works and how to recycle properly. This split was found even within the same accommodation site (e.g., Holyrood “Sustainable waste management, however, was explained and promoted very well” and “not all international students come from countries where recycling is widespread, and not enough is done to teach them how the bin systems work”). Lastly, it was found that residents saw other residents as the problem, that others were not making an effort, or through ignorance or lack of knowledge were not recycling or worse ruining others work of recycling (by throwing the wrong rubbish into the wrong bin, thus contaminating it).

Building and Resources

Another theme that appeared was around the building itself and the resources provided within it. The most prominent theme within this was the building itself that it is not built sustainably, primarily around windows allowing a lot of cold in with both older (e.g., “all the windows are either single glazes or there are wooden hatchedcannot be completely shut...tons of energy go to heating” – Buccleuch) and newer (“window sill was a great place for chilling wine in the winter” – Holyrood). With one person suggesting that it “might be worth investing in making older properties more sustainable”. There were small one-off suggestions of missing resources (e.g., borrow bedding, plants, etc.). However, there was very little within this overall theme, but the issue of older buildings does seem to be a potential issue for sustainability.

Energy

The theme of energy was divided into two, electricity and water, however they often interacted with each other (e.g., hot water uses both electricity to heat up and is about water use) so both will be discussed together. One aspect of this theme was around the facilities themselves. In regards to water there were many comments on the inability to control water flow. In regards to electricity there were many comments in regards to lighting, with many commenting on the need for motion sensors in lights as some lights were left on with no control over them. Within those sites or areas that had motion sensors, it appeared the consensus was that the lights stayed on for too long which was not an efficient way to save

energy. Another mentioned topic was around heating. Some considered it to be efficient, but others complained that due to building design they had to have the heaters on constantly, or that the design of the system meant they had no control over the heating. One other aspect consisted of resources/facilities in general, and many were one off comments around the soap provided being un-environmental, the water inefficiency design of toilets, the old tumble dryers. The last aspect was around people's relationship with energy. It was stated that other residents wasted energy by leaving radiators on, leaving taps running, left ovens and other cooking devices on. However, a couple of responses mentioned how it is hard to communicate the importance on energy savings to students when it is all included in their rent.

Communication and Engagement

The last theme that appeared was around the communication residents received or the opportunities for engagement that were provided to residents. The dominant aspect within this theme was around the communication of sustainability. Unsurprisingly residents who stayed at a non-participating site (e.g., Mylnes Court) did not receive information on the awards or how to be sustainable. However, more problematically, within those sites that did participate, quite a lot of residents also believed that the communication was lacking. This lack of communication was multi-faceted, with some saying there wasn't enough education on sustainability in general (also see above within the theme of bins/recycling), others believed that the accommodation only reported good news, and some also saw little communication on the awards and their goals. Another aspect within this theme was around engagement, some positives were mentioned (e.g., bring your own cutlery to events) others believed it was a very shallow attempt or not enough was made, with reporting by many that they did not feel involved.

In regards to the second question asked of residents, there were few responses, however 3 broad themes were identified. These being Knowledge, Evaluation, and Solutions. These themes will now be discussed:

Knowledge

The theme of knowledge was the most prominent theme. Unsurprisingly the two responses from sites that did not participate had not heard of the awards before. However, within sites that did participate there was also a lack of knowledge of the awards. This shows

a general lack of awareness of the awards which fits with the quantitative results shown earlier. Furthermore, there were a few mentions of a lack of knowledge of the criteria of the awards specifically are or what benefits there were for winning an award.

Evaluation

The second theme of evaluation only received comments from sites that did participate. While one person had a positive evaluation of the awards saying they were a “wonderful idea”, the remaining four comments were negative. It appeared the main critique of these awards is that residents saw them as being ineffective at actually creating environmental change and rather was rewarding surface level or even non-environmental accommodations.

Solutions

Lastly, one theme that appeared was suggestions of how to improve the awards. Three of the four comments were around the need to encourage or require better student engagement with the awards within accommodations. The last comment was more focussed on the need to hold external bodies (e.g., contractors, operators, engineers) to higher standards.

RAs

As previously stated only one RA agreed to be interviewed, who came from a residence that had won a gold award. The semi-structured interview was analysed and will be discussed below under the five areas targeted for the review, Relevance, Effectiveness, Efficiency, Impact, and Legacy.

Relevance

Overall it appears that the awards are relevant and do indeed fit into both the University’s goal to be net carbon neutral by 2040, and into a wider environmental context. The awards were stated to be a good way to raise awareness especially with the large amount of international students that have different backgrounds and knowledge levels on sustainability. It was directly applicable to the role as it encouraged and made them to think about how things were done for events and other things (e.g., cleaning supplies), rather than making them go out of their way and do extra tasks. The auditing process was also found to be very interesting and relevant for the resident assistant spoken to. In terms of support this resident assistant found that their manager (warden) was very supportive and interested in

being involved in the awards. However, there were some downsides in terms of relevance. Firstly, as it was their first time doing it they weren't entirely sure about how the process worked, but found in particular the submitting of evidence was a long process that went beyond what was expected of a resident assistant to do normally.

Effectiveness

As touched on above, it was found that the awards were seen as an effective way of raising awareness, but there were doubts about whether the process did enough. One of the aspects talked about was the effectiveness of the criteria and submission. The framework of the criteria and awards were really great generally. In particular the silver criteria in the workbook was very clear and set out the expectations nicely. However, the criteria was generally seen to be very basic and generic, to apply to as many sites as possible. So it was felt that it was easy to increase some of the criteria. The criteria was also felt to be very long and could get overwhelming, especially when it is your first time engaging with it. There was some trouble with the transport criteria, as this site (as are many) was situated in the city centre. There was also some criticism on the lack of clarity with the gold criteria, especially in comparison to how well structured the silver criteria was. It was felt the form and criteria were not sufficient. The presentation of the gold project and the five questions needed to be completed for it also did not feel like they fit with the type of project that was undergone for the gold project, and that a presentation would be more useful than the forms.

In regards to the online resources though they were seen as quite effective at giving inspiration for ideas. Auditing also seemed to be effective as it was seen as very helpful to see what other sites were doing, which created ideas of how to meet criteria. The training was also seen as a nice way to meet others doing the awards.

The last aspect that was focussed on was whether the awards effectively recognised the work put into it by resident assistants. The award ceremony, and the receiving of the award was mentioned as a rewarding experience. However, it was felt that the awards weren't effective in their current form at recognising the effort put in by resident assistants as the award felt like it was more attached to the site. This was exemplified by the quote "...considering how much work I put into it, it was hard to give the award away". Although a suggestion was mentioned for this, which will be discussed below.

Efficiency

The main focus of efficiency was on the submission process itself. As stated above it was found to be very long, and this was heavily re-iterated throughout the interview. Although it was stated that it was good to have it and that the platform was good, it was just stated to be very long and the collection to be complicated. And whilst they stated that it can't really be avoided, it was potentially too much for a small team to handle as opposed to the large one they had access to. Lastly, it was mentioned that events that crossed over multiple criteria were hard to cross-reference between. The other area discussed was the auditing process. It was said to be a very beneficial process from both sides, as being audited allowed you to explain or clarify any issues, and then auditing yourself was also seen to be beneficial as it encouraged inspiration and new initiatives. The main problem with auditing was the training, as it was seen as more background heavy than actually practical information for the audit itself, which was apparently reported by others. Lastly, the small introduction to the Sustainability Award in the training session was also found to not be very efficient, as it was at the end of the training, when attention had dropped. Although a suggestion was mentioned for this, which will be discussed below.

Impact

One main impact the awards appeared to have was in the mind-set of how to do things. Participating in the awards made resident assistants think about how they ran events, and the background administration and organisation around them. It was “background thinking rather than active”. At their site the awards were embedded rather than promoted as is, which was believed to get people using the system before thinking how it was better. It was found that the awards and this approach allowed a setting up of a framework of sustainability that was embedded. Although some of the changes would eventually happen, the awards appeared to make these changes earlier or perhaps fast-forwarded the thinking around it. In regards to whether the awards just recognised or actually incentivised sustainability, it was found to be a mixed bag. It was suggested that the awards might only be around recognition for students, but for resident assistants it was incentive. Despite the extra work participating did have some benefits for the resident assistant personally. It was found to be useful as going through the different criteria made them think of the best way to encourage students to participate. The process in particular the awards were said to be a “rewarding” experience.

Legacy

In regards to the legacy of the awards. The resident assistant said they would be interesting in continuing participating, as the area of sustainability was of interest to them, but that they would have delegated better. However, it was said some in the team said they would think twice before signing up again because of the burden it puts on the lead resident assistant. It was also suggested that there should be some recognition personally for those students who work on the awards in a similar way to the Edinburgh Awards appearing on official transcripts. It was also suggested that there should be some recognition of continual achievement of standards, however, it was noted that continuing with gold would be difficult due to its nature. There was also a suggestion of moving up the training schedule or having a separate training session for just those who are interested in participating, and the importance of letting people know what would be expected of them.

Wardens

Wardens were interviewed from sites that participated at various levels. An online survey was also sent out to wardens who did not participate. The semi-structured interview for wardens who participated was analysed and will be discussed below under the five areas targeted for the review, Relevance, Effectiveness, Efficiency, Impact, and Legacy. The surveys sent out to wardens who did not participate received little information and will be briefly discussed at the end.

Relevance

Overall the awards were reported as relevant in regards to fitting in with both the University's goal to be net carbon neutral by 2040 and into a wider environmental framework. In regards to their role specifically, all the wardens interviewed agreed that it fit well with the tasks/their role as warden, with two mentioning that it was useful for creating goals and motivation for their resident assistant team with the structure and targets the awards provided. Furthermore, it appeared the criteria were mostly suitable and appropriate. It was mentioned that the criteria were easy to adapt and adjust to fit better within their accommodation setting when needed, but overall they fit quite well. There were two areas of improvement mentioned. Firstly, it was mentioned by one warden that the administration was a bit on top of what they would normally have to do, and that there was a challenge finding time to attend trainings. It was noted that it was perhaps harder/more work because it was their first time doing the awards, and that it would get easier overtime. The second issue was

mentioned by all wardens was tasks or areas outside their control. In this it was stated that some aspects of sustainability were out of their control despite, appearing to students to be, such as domestic staff and the lighting, which are either other teams or controlled by external people. And some areas due to their nature (Pollock halls being catered) made it difficult to talk/control food waste. In regards to how sites initially started on the awards two people were mentioned in particular as being important. Firstly, a staff member (name redacted for confidentiality) was one of the first wardens to go for the awards, which were mentioned in induction but so far had not been taken up. And their success appears to have motivated other sites, as well as Residence Life to pick up on this initiative. The other person mentioned at helping coordinate or promote the awards was a staff member (name redacted for confidentiality).

Effectiveness

The major area discussed was the online materials provided by the SRS department. It was mentioned that there was enough material online, and that it was great and very helpful. In regards to what type of information was there it was suggested the short concise information was better, as the awards are already extra work for the resident assistants, and that checklists and easy to use formats were the best way to go. It was also mentioned by one warden that a calendar of what's happening around the city in regards to sustainability would be really useful (e.g. bicycle week). It was mentioned by one warden that the first time they came across all the materials it was a bit daunting, but that once you got used to it wasn't that much.

One of the areas discussed in regards to effectiveness was the auditing process. Across the wardens interviewed all praised the use of student auditors to conduct the auditing process itself. It was mentioned that it was a good opportunity for the students and allowed the swapping of and creation of ideas.

Lastly, the other aspects of effectiveness were minor and will be mentioned together. It was believed that the awards were good at recognising the efforts put in by staff and students, that it provided motivation. It was also mentioned that it was effective by being awarded to the whole site, as there are multiple staff who contribute to the awards. In regards to the awards effectiveness it was mentioned by one warden that there appeared to be a gap or lack of promotion of the awards. This was compounded by another warden who said that one

way to encourage participation might be through a similar style of the Edinburgh award, which is placed on the transcript. Lastly, it was stated that the gold criteria was a bit unclear and could be improved.

Efficiency

One area discussed with regards to efficiency was the auditing process. The use of students, in particular resident assistants, was said to be an enjoyable experience, and with resident assistants already knowing the jargon and operation of a student accommodation was said to make the process easier. However, it was stated that, the moving to be earlier would be useful, probably for the earlier transmission of ideas. Secondly, it was stated that the current auditor training was too theoretical and could focus more on how practically the audit is done.

The other major area discussed was the submission of the awards itself. For two of the wardens it was found to quite easy. It was mentioned that the new online system was better, easier, and more intuitive for filling in the submission than the unwieldy word documents that used to be used. It was also reported to the one warden that the resident assistants found it was user friendly and enjoyable to use. One warden however thought that it was not easy collating all the documents for all the events. However, they were not sure how it could be improved. They mentioned that it helps if the team is on track early on with collecting of evidence. This appears to be true as one of the wardens who found it easy mentioned they streamlined the process and made it easier, by simply including a little section at the end of event reports (which are mandatory) if they related to sustainability and how.

Lastly, it was mentioned that the workshops were very useful for sharing ideas through the networking opportunity they provided. It was also mentioned that the workshops were great and encouraged students to think about sustainability.

Impact

There were four key areas identified in regards to the impact of the awards and participation in them. These were the incentive they provided, behaviour or site changes, impact on residences, and impact on self.

With regards to whether the awards provided an incentive to act or change behaviour or merely just recognised existing practices, all wardens reported that the awards definitely provided an incentive to act sustainably. It pushed sites to do more in regards to sustainability

across the board. One warden stated that some of the changes made to be more sustainable were quite intensive and if there wasn't a framework (the awards) to applaud this, these changes would be unlikely to happen. One warden said they did recognise the work that was already done, but that this was a benefit to the awards. This was because by recognising the aspects that are already done it provided a foot into the awards, and then incentivised action on the other criteria that weren't being focussed on majorly.

Another aspect in regards to impact was the behaviour change or other changes made by sites to receive the awards. One change across the sites that has been seen is a reduction in single use plastics by moving towards bring your own mug, etc. to events. It was also reported there was a change towards better recycling. While some of these changes might be small, one warden noted that the environmental impact is quite obvious and large, for certain big sites like Holyrood. Another area that was said to be impacted positively by the awards was a mind-set change to incorporate more areas of sustainability, or sustainable practice throughout events and initiatives.

In regards to the impact the awards have had on the residents itself, there was mixed reporting on this. It was said by one warden that they definitely did have an impact on their residents, that there was great involvement, particularly around their one project that they ran, which included a survey at the beginning and end of the week long project, and found a quantifiable impact on the students. Another warden was a bit more uncertain of the impact stating that it certainly did impact some residents, but would not be confident saying all residents were reached. They were also uncertain if the message of sustainability had gotten across to all students, however, they did see a positive impact on students through shifts in food and other areas, e.g., having a group picnics for lunch. They also found that their one initiative to show the cost of electricity had an impact on some students. The last warden mimicked this, and said there was no direct impact on residents besides those interested. But all did report or suggest that there were impacts on the wider team or background operations that would indirectly affect residents.

The last main area of impacts was in regards to the impact the awards had on the warden itself. All wardens reported that the awards did indeed have a positive impact on themselves. It was stated that it was good for job satisfaction by being recognised and awarded for the work put into these wards and sustainability. It was also helpful for

development through the skills learnt at workshops, and through participating demonstrating their ability as a warden. Lastly, it was mentioned that the ceremony itself was mentioned as very uplifting both for self and for those who worked towards the awards.

It was also mentioned that the awards were useful as it provided a framework to review the progress so far.

Legacy

In regards to the legacy of the awards two of the three wardens stated that they would definitely promote the Sustainability Awards with their future teams, and the one that achieved gold stated they would be happy to do another gold project if their new team wishes to. The last warden stated that they would be interested in participating if their new team was, but that even if they didn't they would maintain the changes that have been made by participating in the awards so far.

Another aspect that was discussed was the structure of the awards. It was mentioned that there should be an incentive for maintaining an award. And while it was mentioned that the awards are good now, as students and resident assistant teams change often yearly, for the more permanent staff in accommodations some form of recognition for continued service was said to be a good suggestion. Although it was mentioned by a warden that staying at level almost felt like there was continued progress, even if that wasn't necessarily true. There seemed to be some support for a 4th level of the awards for outstanding contribution. The current structure of not being able to go straight for gold was also mentioned by one warden as a positive, as they felt if you achieved gold immediately there would be little motivation to progress. Another warden also brought up the question of whether the goal of the awards was number of sites participating or hard progress with option of failure.

In regards towards the legacy of the awards on students in the future, all the wardens hoped and to some extent believed that the awards did indeed have a long-term impact on their residents, even after they had left. A strong focus was on a change in mind-set that would then lead to more sustainable practices going forward. There was some doubt whether to this was happening, as it is difficult to gauge amongst one warden. Another warden believed that they could do more in the future and wanted to focus and change some events/initiatives going forward to focus on sustainability after students had left.

Overall though the rewards appeared to be positive, which was nicely summed up:

“I’m a huge advocate for the award, and find it super positive so I only have good things to say. I have some criticisms or suggestions for how things could be slightly better, but with regards to any major issues or overhauls it’s absolutely nothing”.

Non-participants

Of the three wardens who responded, all had heard of the Sustainability Awards. Of these three, two believed it was relevant concern in their work and in their job description. All three though believed it was relevant to the work conducted in the residence. The remaining questions were only completed by two wardens, and both said that they would encourage their resident assistant teams to participate, and that the awards are likely to encourage sustainability. From this limited group there appears to be a desire or an importance seen in participating in the awards. However, only one offered a suggestion for what prevented them participating, which was serious disciplinary issues and lack of staff that prevented participation.

Discussion

Overall there was quite a positive feedback towards sustainability at all three levels, students, resident assistants, and wardens. Despite a lack of responses from resident assistants, there was an assessment of all three levels of the accommodation awards as intended. Generally speaking there were improvements mentioned by all levels, with a particular dissatisfaction from students. The overall findings will be separated and discussed under the headings of Relevance, Effectiveness, Efficiency, Impact, and Legacy, with a final discussion on whether the outcome objectives set out by the awards has been achieved.

Relevance

Overall it appears that the awards are indeed relevant to residences. There was a consensus from wardens and resident assistant that the residence Sustainability Awards not only fit into the University’s long-term vision to become a net zero carbon university by 2040, but also that the awards fit into a wider environmental framework. There also appears to be a consensus that the work required for the residence Sustainability Awards fits well into their roles as wardens and resident assistants. Furthermore, it was stated that the awards provided a framework that assisted with some of their responsibilities and tasks. This suggests that the current residence Sustainability Awards are indeed relevant not only to the University’s goals and a wider environmental framework, but also to the work done at the



University's accommodation. Although students were not asked about the relevance of the Sustainability Awards they do appear to be relevant to students with 55% of students indicating that they were more likely to choose an accommodation that had won a Sustainability Award. This combined with the fact that 86% of students reported that they were more likely to be sustainable in the future highlights the importance and relevance of sustainability, and awards for it, for students. In regard to the awards themselves it appears that the criteria, and their flexibility, as well as the auditing process are indeed relevant for the work done in University accommodation. Lastly, it appears the awards are seen as a good way to raise awareness about sustainability issues, thus achieving their goal of relevance.

There were however a few aspects of the relevance of the residence Sustainability Awards that could be improved. Firstly, although the work required for the awards is for the most part relevant, it appears that the administration side of the awards is not directly relevant to the work required or expected within the University accommodation. In particular it was mentioned that it seemed excessive especially for someone doing it for the first time. This is problematic for two reasons, firstly it might dissuade others from participating in the awards if the initial administration is seen as excessive, secondly this is a particular problem for residences due to the high turnover rate of resident assistances. Another issue for improvement was that some areas of sustainability were not relevant to University accommodation, at least in how they are managed currently. As areas of obvious sustainability, such as lighting and heating outside of the control of those who participate in the residence Sustainability Awards. This need to hold external bodies to higher standards was also mentioned by a student.

Despite these flaws and areas of improvement, the residence Sustainability Awards are indeed relevant. This appears to be true for all levels from wardens to students, and to both the University's goals to be net carbon neutral by 2040 and a wider environmental framework.

Effectiveness

Whilst the specific outcome objectives of the awards overall will be discussed in its own section later, the specific goals of the residence awards and the effectiveness of the awards at achieving will be discussed here. The residence awards covered the five themes of student engagement, resource efficiency, travel, energy, and personal welfare and wellbeing.



Whilst most students believed that their sites were effective at reaching these goals of the Sustainability Awards, this varied dramatically and did not seem to fit with how students rated the goals spelled out individually. With students on average rating their sites as being ineffective at resource efficiency, communication, travel, and water and energy saving. Even worse rates were very low for students believing their sites involved and informed them of the awards. The only criteria that was seen by most students as being effective was supporting mental health and wellbeing. This mismatch between an overall high effectiveness of reaching the goals, but low effectiveness at achieving the goals individually, suggests that students are unaware of what the awards are. This lack of awareness of the objectives of the residence Sustainability Awards seems to be supported in that 75% of students were not certain if their site was participating, with also very little knowledge of the SRS department itself.

In regards to the criteria specifically for the resident assistant though the framework and criteria were said to be very good, albeit basic and generic, and that some could be increased. Although this flexibility was mentioned as a positive as well, to allow adaptability of some criteria like the transport one fit better. Though it was mentioned by both wardens and resident assistant that the criteria for gold was a bit unclear and could be improved, as well as the presentation of the gold award.

Whilst the students clearly did not feel that the communication of sustainability was being achieved effectively. Resident assistant and wardens believed that the awards were effective at raising awareness, but even amongst this group there was some doubt about how effective this was. Thus, this appears to be one of the biggest areas to work on.

Broadening beyond just the goals of the awards, other areas of effectiveness were also examined. One of which was were the awards in their current framework recognising the effort students and staff put into the awards. Here it was only found by the wardens that awards were effective at recognising staff and students, and that awarding the whole site rather than a team was beneficial. This was not found by students and resident assistant who change regularly each year, and found that the awards were not effective. However, the ceremony was mentioned as a positive. This area is perhaps one that needs to be improved on as it does not appear to be effective at recognising the effort of those who rotate through the position each year. It was suggested by both a resident assistant and a warden, that something



along the lines of the Edinburgh award, where the recognition is placed on your transcript might be a way to effectively reach those who put in the effort towards the awards.

The online materials and the auditing process were also an area in which effectiveness was discussed. Overall it was found that the online materials are effective tools by both wardens and resident assistant, although it can be seen as daunting at first. One suggestion was to add a calendar showing sustainability events that already exist around the city (e.g., bicycle week). Across the board wardens and resident assistant saw the auditing process as effective, especially as an effective way to swap ideas and to meet others doing the awards.

Lastly, one major area discussed was the effectiveness of actual sustainability by the accommodations. This was dominated by students' feedback, who only 38% believed their accommodation had a good impact on the environment, and 49% believing their accommodation has no impact on their sustainability behaviour. There were multiple areas the students touched in regards the effectiveness of sustainability of their accommodation. Firstly, there appears to be quite a divide on the effectiveness of recycling facilities reported by students, even within the same accommodation site. This was compounded with some residents saying that it's not the facilities fault but the fault of other residents not knowing or caring about the recycling system. This suggests that an audit needs to be performed on the facilities, and the level of information provided in regards to recycling, especially to international students. Another area that was mentioned as ineffective was building design, particularly older buildings which appear to be ineffective at meeting the goals of sustainability. The conservation of water and electricity was also mentioned as ineffective, it appears that many consider the inability to control these facilities is ineffective as it means individuals are unable to reduce use if desired. Furthermore, the lack of motion sensors are mentioned as ineffective, and when there are the length of time they are kept on is ineffective. This suggests that the effectiveness and availability of water and energy saving be examined, although caution must be taken in providing too much control, as one area students mentioned was that others were overusing heating. However, providing too much control, might also lead to ineffective energy saving.

Efficiency

As well as the effectiveness of the Sustainability Awards was examined, the efficiency was also examined. The main area of efficiency examined was the online



submission process. Whilst both wardens and resident assistant agreed that the website was good and easy to use. The efficiency of the question was questioned by both, stating that it does take quite a bit of work and is very long. One way to improve efficiency was suggested by wardens, was to have teams be continuously on top of the submission, and collect evidence easily throughout the year (e.g., by adding a section on sustainability to the already existing mandatory event reports). The other area discussed was the auditing process itself, it was mentioned again by both wardens and resident assistant that the use of students, in particularly resident assistants, was an efficient use of resources. This was believed as it provided useful ideas for students/resident assistants in regards to sustainability, but also made the process easy by having individuals who already know how the University accommodation system works, and the language used within it. However, the one area that was mentioned as inefficient was the training itself. It is inefficient in that it highly focussed on theoretical background, rather than the practicalities of an actual audit. The timing was also inefficient, as it was mentioned it was introduced too late in the year. Lastly, while the workshops and programmes were said to be an efficient use of resources, the initial workshop/introduction to the Sustainability Awards during resident assistant training was found to be inefficient as it was introduced too late in the training (in terms of attention) and given to all resident assistants rather than just those interested.

Impact

As mentioned in the outcome objectives, the current residence awards reach 71% of students staying in University accommodation. This provides a great opportunity for having a widespread impact. However, the impact of the awards was not felt by many of these students. Only 38% of students saying their accommodation had a good impact on the environment in general. However, 51% said that their accommodation was effective at being sustainable. This demonstrates while the residence are having a potential wide impact, it is not having as good of an impact as it can with overall environmental impact, and is only slightly better in regards to sustainability specifically. The qualitative analysis was on a very small number of students (5), only one of them said the awards were a good idea, whilst the others believed that their accommodation and the awards were just rewarding surface level impacts. This suggests that the awards can be significantly improved in the level of impact they have for students. This was similar to what wardens said, with a general belief that the awards do indeed have an impact on students, but that it is not widespread, and more can be

done to increase the impact. However, these wardens all said that there was a larger impact on the background running that would impact students indirectly. This might be one reason why impact is rated as being very low for students. However, it is clear that students are not feeling the impact, and there needs to more direct impact on students, or to make the indirect impacts more obvious.

A brighter picture in regards to impact was reported by wardens and the resident assistant though. With regards to whether the awards were actually having an impact to incentivise sustainability practices or merely recognising them, both wardens and resident assistants agreed that the awards definitely had a positive impact by incentivising sustainable practice changes rather than just recognise existing work. With one warden even stating that some of their major sustainability initiatives would probably not be as successful or exist if it wasn't for the awards. It was mentioned that having some aspects be merely was a benefit and had a significant impact, as it gave you a foot into the awards, and then had the impact of incentivising you to work on the other areas. In this regard the awards definitely have a positive impact on sustainability in accommodations. The awards seem to have changed across sites the use of single-use plastics, with a big reduction reported with initiatives like bring your own to events. It was mentioned that whilst these might seem like small impacts, across the many students that stay at University accommodation this can build to be a significant impact in regards to sustainability. The other impact the awards were reported to have by both wardens and resident assistant was on creating a mind-set change towards sustainability, and a greater thinking of how it can be integrated into University accommodation.

Lastly, it was reported by both wardens and resident assistant that the awards had a great impact on themselves personally. That it provided an opportunity to work in an area they're interested in, and to develop their skills in regards to sustainability and accommodation living. It was mentioned that the award ceremony had a very positive impact, and made competing in the awards feel like a great achievement. In this regard it appears that the positive impacts of the awards are definitely felt by both wardens and resident assistant, and in the wider running of University accommodation.



Legacy

It is difficult to assess the continuing value of the awards for students once they have left as there is no current mechanism in place to assess student's sustainability from when they start living at student accommodation, to the end of their living there, or how they behave after they have left. It is recommended that a mechanism be put in place to measure this, in order to be able to assess whether the awards are indeed having a lasting effect on students. It is also difficult to access the lasting impact on accommodations without base levels before intervention. For example the reduction of single use plastics definitely does have a permanent lasting effect but it is not quantifiable without the numbers of plastic reduction. Furthermore, some of the lasting impacts of sustainable practices are hard or impossible to measure, e.g., a sustainable herb garden does indeed promote sustainability, but what metric would be used to measure this. Thus, it is important when assessing the legacy of the awards to consider these harder to measure impacts.

As mentioned before amongst students there is indeed a high level of interest or willingness to act sustainably in the future (86%). Furthermore, whilst there are indeed issues for students in regards to the sustainability of their accommodation, 31% believe their accommodation has had a significant impact on their sustainability behaviour. So there does appear to be a lasting legacy of sustainability that is at least for some influenced by the sustainability promoted at their accommodation.

The awards appear to provide continuing value and the positive impacts lasting as both wardens and resident assistant said they would be participating in the awards in the future. The award structure was mentioned to provide continuing value going into the future as it provided an incentive to aim better in the future. It was particularly mentioned that the inability to achieve gold immediately contributed to this future desire to continue participating. However, it was discussed and agreed that recognition of continued service would be something good to reward as it shows commitment to the legacy of sustainability. This could be done through rewarding a certain number of years achieving a level of sustainability. While there appeared to be some support for a fourth level to further increase the legacy of the awards, it was not as widespread as agreement for a continued service award. For the resident assistant it was suggested that the award itself does not provide much continued value in its current form, and recommended it work similar to the Edinburgh Awards and be included on one's transcript.



Overall though the awards are definitely seen as a rewarding experience and one that needs to be continued. It appears that the awards have indeed had a lasting legacy at least for wardens. It was said by one warden that the mind-set change is something that provides this positive legacy of the awards, and that they hoped that this mind-set change was continued in students, with another warden recognising that this is an area they would like to improve on. It was also agreed by all wardens and the resident assistant that the changes made by the awards will remain in place, and continue to provide sustainable practices.

Outcome Objectives

With regards to the outcome objectives that were outlined for the Sustainability Awards, two of the eight directly apply to the residence Sustainability Awards. These are Objective Three: Awards continue to have value, and Objective Four: That by 2020 have 20 residence sites participating in the Sustainability Awards scheme.

Objective Three: Awards continue to have value

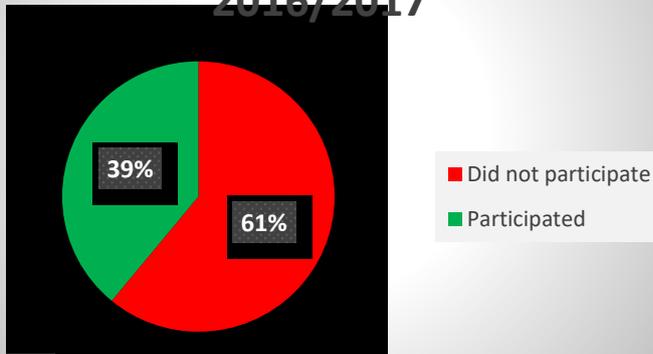
As discussed above, the awards definitely to continue to have value, providing wardens and resident assistants with a sense of accomplishment and personal achievement. The large increase in numbers (discussed below) and continued participating of all sites who originally participated, and verbal commitment to continue participating, suggest that the awards do indeed have continuing value. It was mentioned that the changes that have been made from the awards have been beneficial and long-lasting. However, while there appears to be continued value of the awards for those who work and manage University accommodations, the same cannot be said for students. There appears to be a significant proportion of students who are disgruntled with the awards and that they do not have value. The awards clearly could have value, with 55% of students saying they would rather choose an accommodation that has won a Sustainability Award, and with 86% interested in acting sustainably in the future. However, in their current format they do not provide value to students, and greater work needs to be done in the communication of these awards to students by their sites, and the benefits made clearer to students.

Objective Four: By 2020 have 20 residence sites participating

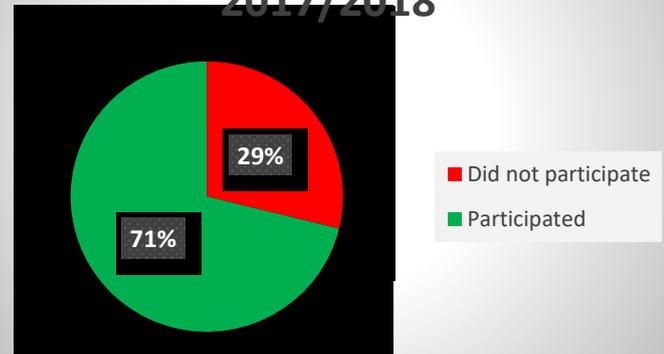
In the first year of the residence Sustainability Awards 14 sites participating as 9 teams and receiving awards, with 4 silver awards, and 5 bronze awards being awarded in the 2016/2017 year. This covered 3208 of the 8223 students staying in University

accommodation that year. In the second year of the awards this outcome objective was not only achieved but exceeded the goal with 32 sites across 22 teams participating and receiving awards, with three gold awards, 11 silver, and 8 bronze awards in the 2017/2018 year. This covered 6199 of the 8709 students staying in University accommodation that year. Thus, this objective has been achieved 2 years earlier than expected, and perhaps should be raised to continue pushing the residence Sustainability Awards. Although not awarded 32 sites across 23 teams are participating in the 2018/2019 year.

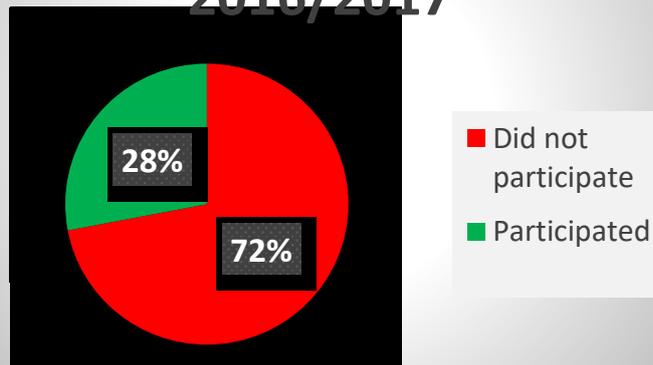
Students reached -
2016/2017



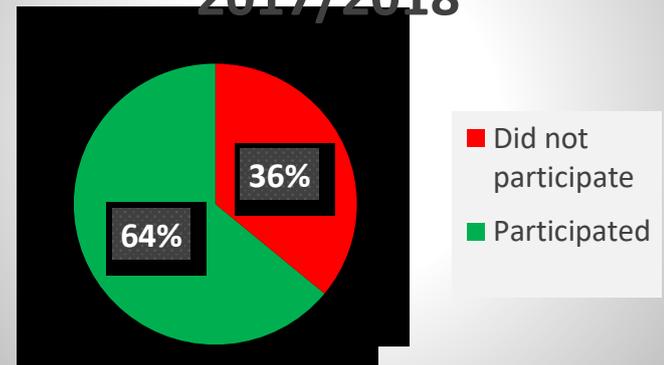
Students reached -
2017/2018



Residences -
2016/2017



Residences -
2017/2018



Offices

Before discussing what was done for the office awards as part of this review. It is important to note that a review of the office awards specifically was completed and done by Clara in 2017.

Methodology

In order to assess the office Sustainability Awards. Invitations were sent out to various offices who had participated in the awards, contacting those who were now overseeing the awards. These invites were sent out to systematically to try and cover a range of offices from those who have participated for a long time, to those who have newly participated, and at various award levels. As a result of these invitations five one-one semi-structure interviews were conducted, with the structured questions found in Appendix B. An online survey was sent out through SRS department communications with the help of a staff member (name redacted for confidentiality), to reach staff members from both sites that had and hadn't participated to try and get a multi-level analysis. Unfortunately, only 4 completed surveys were received. The questions for this survey can be found in Appendix B.

Results and Discussion

The results and discussion of these above interviews and surveys will now be presented broken down into their level of assessment. All data was assessed using NVIVO 11. The results from the interviews with offices that were participating will be first discussed, and then a brief analysis of those offices who responded to the online survey.

Relevance

Overall the awards were relevant for sustainability, with all reviewed offices stating that the office Sustainability Awards fit into a wider environmental framework. There was some disagreement over whether they fit into the Universities' goal to be net carbon neutral by 2040 though, with only half agreeing that the awards fit into both a wider environmental framework and this goal. In regards to how sites started it seems predominantly done by people interested in sustainability who either initially heard through emails from the sustainability department, or joined an office where there was or had been an awards team before. One office mentioned that the awards are relevant as they provide a channel to be



recognised for green behaviour, such as ordering green stationary, which would not be recognised elsewhere. With another office finding that it helps encourage others to do a little more and share ideas of best practices in regards to sustainability, from people who might not participate otherwise.

The relevance of the framework and criteria of the awards was discussed in detail with two offices. One office mentioned that they had seen a significant improvement in the criteria from when they first started. It was mentioned when they initially started the criteria was very inflexible and did not account for some not fitting in with the ethos or reality of a school. However, the criteria now was praised as being a “nice new friendly platform” where there was a lot more flexibility and provided more than enough options to pick from. The other office praised how open the award system was to working and involving students. This was raised as a positive because they found that students wanted to be involved, so much so that their entire gold project was ran because of the push from the students. Current students who were asking why sustainability wasn’t part of the curriculum, and even applicants to the University were asking about it. This large push from students for sustainability in the curriculum, led to this office’s gold project to highlight sustainability that was part of the curriculum.

In regards to whether the awards fit well into their existing roles or whether it was considered additional work, there was a bit of a divide. However, most people agreed that the work for the awards was seen as over and above their current role, that it was additional work. This would suggest that the awards are not directly relevant to their office roles currently. But it was mentioned by half of those who saw it as additional work that it is built into their work load, as their work allows them to take on tasks outside of their work that one is interested in. So whilst it might not be relevant directly to the role, the awards seem to be relevant to the people themselves. Furthermore, it was mentioned by all that there was support from above in pursuing the awards and sustainability in general. Thus, it appears that the at times lack of relevant to one’s role is not that large of a hurdle. However, it is important to note that this information is from sites that have/are participating and it might be the case that those who do not receive support from above do not or cannot participate. This seems likely as one office mentioned that without the support it would be a lot harder to participate, especially due to their distanced nature from central campus, that without the support to attending meetings elsewhere for the awards they would be unable to attend.

Effectiveness

In regards to the effectiveness of the office Sustainability Awards, four main areas were identified. These were the auditing process, the online materials, recognising the work by the team, and the unity/sharing aspect of the awards. These and the smaller group of other comments will be reported below.

Amongst those interviewed there was overwhelming support and praise for the effectiveness of the auditing process in its current form. The use of students in particular was praised by a number of sites specifically. It was stated that it was more effective having students perform the audit as they were likely to ask the harder questions, and come in with a different point of view to one that would be held by another office. One office stated that as long as someone was trained, the most important factor was enthusiasm, which they found students were. This was mimicked by another office that said students were the main pushers of sustainability rather than staff, which would fit in with the idea that students are enthusiastic. In regards to the actual audit itself one office said it was “relatively painless” and found that the advance questions on what areas they were going to look at helped make the process run smoothly.

The other major area discussed in regards to effectiveness was the online materials, which was found by all to be generally effective. A couple of people mentioned that it was effective and nice to have resources that could be already used instead of something one needs to develop, especially when one isn't very good with graphics. However, it is important to not stifle creativity and allow teams to produce their own materials, as this was something that occurred in the past that one office mentioned was ineffective, as they liked to produce their own graphics that they felt fit the space better than the ones provided online. The one minor issue around these is that one office was uncertain how to best use these resources as printing is unsustainable, another office got around this by their building being modern and having TV screens that the materials can just be added to. In regards to what could be improved it might be as one office suggested “really depends on the school”. Two offices reported that the current material and system for collecting evidence was effective and they just included the current checklists as part of their existing ones. For the two offices who said materials could be added it included a yearly planner, advice on how to set up a new group and the delegation of responsibilities, and lastly experiences from other offices.



The question of whether the office Sustainability Awards were effective at recognising the effort put in by staff and students was also considered. Overall there was a belief that the award being awarded to the building/office was better than it being assigned to the actual team or individuals who were responsible for award submission. This was for a number of reasons. Firstly, it was believed that the whole office, rather than just the team were contributing to the awards and sustainability. It was mentioned that this had the benefit of allowing people to cheer or support their “team” rather than a group. It was also mentioned that it allowed an easier transition/turnover of membership. One individual did mention that the being attached to a site did perhaps not recognise the work of individuals specifically, although they mentioned it was not a problem, they did say it could be quite difficult to get individuals to participate in following years. Although another individual felt that the school and awards ceremony offered this chance for personal recognition of those who had directly participated. One last benefit of being awarded that feeds into the next major theme, was that people felt just being awarded to the team felt a bit isolationist and that by awarding it instead to an office helped with a sense of unity.

The next major theme discussed was the unity and sharing opportunities that the office Sustainability Awards provide. A couple of sites mentioned the awards were effective in that they allowed for a great unity in some fragmented departments that were split across the University, and felt it effectively pulled their team together. With one site even mentioning that having joint meetings between their lab and office team being very effective. However, there were a number of critiques of the awards in regards to effectiveness in regards to unity and sharing. The majority of sites said that it would be very useful to have some sort of platform or system of sharing information with other sites. This would prevent a feeling of isolation, as one team specifically mentioned they weren’t aware of who else was even participating. It was also mentioned that this would be effective at transmitting ideas for how other schools/offices are tackling the criteria, and give inspiration for one’s own projects. This was especially suggested in regards to sharing of the case studies of gold awards.

There were a few other areas that were mentioned in regards to their effectiveness but did not take up as much prevalence as the previous areas. One area discussed was broadly the effectiveness of the awards themselves. It was said that the small projects one had to do for the awards were really effective, as they were easy to do in multiple places to help raise

awareness. But there was some trepidation about one office about how easy it would be to collect certain information on how effective their projects they had to do would be. It was mentioned that the criteria was effective, as it allowed one to pick from options rather than having an inflexible list. But it was mentioned by the same office that it might be hard to achieve effectively with a team of one. One office mentioned that older buildings prevented some programmes from being very effective, as it prevented sustainable action e.g., single glazed windows. Lastly, it was mentioned as a whole that the SRS team was very effective at providing help when needed, but also in being pro-active and asking if there was any help needed. The team was mentioned as being very supportive by a number of sites, and are seen as open and friendly. One site also mentioned that overall it had been a really positive experience for them participating.

Efficiency

The efficiency of the awards was discussed in two major areas. Firstly the efficiency of the online platform used to currently submit for the office awards, and secondly about the efficiency of the workshops.

In regard to the online platform's efficiency there was a mixed response. It appears that a number of offices reported having issues with the online system, particularly in getting access to it, and it deleting the work that had been put into the system. While this inefficiency was fixed with the help of the SRS department, for one office it meant having to restart their submission. There were other issues around the efficiency of the system. Firstly, it was mentioned by one office that they found it a bit difficult to move things back and forward on the online system, for example the minutes of meetings. Although it was mentioned that once you got the hang of the system it became easier, and that it was just daunting at first. It was also found by another office that there wasn't enough clarity on the evidence that was required. It was found to then be an inefficient process as they believed they might have collected or uploaded too much evidence, creating extra unnecessary work. Despite these issues with inefficiency of the online system, the majority of comments were around the positives, and that it was an efficient system, and that it was great that you could submit it all online. Specifically two people who had used the old system said the new system was much better. That it was much easier to use and was intuitive, and had a lot more flexibility built into it in regards to choosing criteria.

The other area of efficiency, the workshops, on the other hand nothing but praise for them. Alan Peddie in particular was mentioned as being very effective at encouraging participation, and creating an environment where everyone participated both staff and students. It was mentioned fairly unanimously that the workshops were brilliant, even when one didn't expect them to be too interesting. With one office in particular saying that they "exceeded the expectations of what I had for what I'd get out of them". Even for those who didn't find the specific presentation that useful as it didn't apply to their office well, they found that the social networking aspect of the workshops really positive. One office mentioned that they were trying to mimic the SRS workshops in their suppliers' day workshops, in an attempt to reach out to suppliers to be sustainable.

Impact

The impact of the office Sustainability Awards was assessed in a number of different ways. The first area examined was whether the awards recognised work that was being done, or did it incentivise further sustainability work. For the majority it was found to be a mixture of both. It was found that some of the activities that were done already for sustainability, or for other areas such as money saving could now be recognised, whereas before there was no channel to do so. But the awards did not just recognise they appeared to incentivise people to move forward with new things. With one site in particular mentioning the sustainability fund allowed for some changes that were done specifically because and through the awards. It was mentioned that it provided a concentrated effort with set objectives to aim for. Although one site said they were more recognising efforts that were going to take place they did mention that they had made changes because of the awards. On the flip side one office felt it provided a really big push for them and allowed them to jump forward considerably.

Although there seemed to be a bit of a mix on whether the awards recognised or incentivised change, all sites reported that the awards did have an impact in regards to changes made, even those that said the awards recognised more than incentivised. It was mentioned that the awards provide an effective framework and tool for encouraging participation and explaining change. It was easier to make changes with the incentive of an award behind it, and others who weren't participating in the awards but were affected were more likely to go along with it. It is also seen as a positive by heads of departments. Who enjoy their offices winning awards and are pushing sustainability on the back end with one office reporting that Be Sustainable training was being made mandatory at all sites. There



have been some physical changes that have come about that have been more sustainable. These include using the sustainable campus funds to purchase freezers, keeping track of sustainability tasks, giving a format to test-run sustainable projects on a smaller scale before implementing them, greater use of shuttle busses, more thinking on what is done with waste, and thinking of how to perform general office tasks more sustainably. Working in the Sustainability Awards even promoted sustainable behaviour and projects in one office that weren't included in the awards (a vegetable garden). Furthermore, the awards have encouraged and started in another awards scheme looking at wicked problems

It is found that sustainability is also being made more aware and supported of around the University, being added to staff inductions and directly into course material for one office. This has led to one of the biggest changes is within people. Generally speaking participating in the awards has made people more aware of sustainability in their daily life, which is subsequently leading to behaviour and habit changes within people. One office mentioned that it was beneficial as it dragged in others to also be enthusiastic about sustainability. One big thing around people that has come out of the awards is that it is encouraging staff not participating directly to start suggesting ways to improve sustainability around the office. Participation seems to be quite high amongst offices participating, and it appears to have had some side benefits that are not directly related to sustainability, but more wellbeing. Staff appear to enjoy some of the tasks for the Sustainability Awards (e.g., walking challenges). Two sites mentioned that it increased morale and brought the team closers, which was a particular advantage for some sites who found they had issues with staff coming together due to their office being split over multiple sites. This has led to increased communication and meeting others around the university.

Lastly, the impact of the office Sustainability Awards on individuals was discussed. All reported that it had impacted them positively. All reported that it increased their job satisfaction. For some it was because they got to participate in something they've always had an interest in or it allowed them to bring in previous qualifications into their role, which they didn't believe they could. For others it was the work they did that brought them satisfaction, either by working on something they liked, or the physical impact their work in sustainability has had so far.



Legacy

Lastly, the lasting legacy of the awards was discussed. All sites stated that they did indeed intend to continue, suggesting that for these sites there definitely exists a continuing importance and desire to continue with sustainability behaviour and the awards. The results from this can be split into three areas: the award structure itself, the continuing legacy into the future the awards have, and lastly, the limitations of the Sustainability Awards.

In regards to being asked about the award structure and its continuing value quite a few sites mentioned the issue of not progressing. The majority of sites mentioned they felt that not progressing to the next level seemed like a failure, or that it was not good enough to maintain the level you had just gotten. One site did mention though that they thought the structure was very good and they liked that there was no pressure to push for gold. Two options were discussed about future changes were around adding an additional fourth level to the awards and the idea of a continuation award that awarded teams for long-term service at sustainability. The idea of a fourth level did not receive much support with one team outright stating they did not like the idea of it, as it presented a runaway levelling system. However, there was widespread support for some sort of recognition or award for continuing/maintaining a level of the Sustainability Awards. One office that is a long-term gold winner presented a change to the award structure for those continuing with gold. It was suggested that for gold teams continuing instead of doing one big project, teams could do smaller shorter projects with the bulk of their gold submission being as a mentor for other teams. This could also be done through open sustainability days to show others what is being done, and also to start thinking of bigger collaborations in the university.

Sites were also asked about the continuing legacy of any changes made for the awards, and what would happen to them if the awards programme ended or they did not participate. Sites reported that some of the aspects of the Sustainability Awards, or projects they did for it would definitely continue, especially those around habit changing. This was seen already particularly around tasks that involved other people or being in the environment, such as step challenges and alternative transport use. It's already been seen that some people said they would initially do it for a month, but have continued to do it long after. One site mentioned that specifically for their school they would continue being sustainable regardless of the awards because of their funding and push from head of school to be sustainable and less wasteful. However, a few sites did also mention that without the awards that some things

would start to slip or waver, especially during busy times of the year if sustainability wasn't a well-integrated process. With one site stating they had already seen this happen when they joined the office.

Lastly, limitations of the Sustainability Awards was discussed. One office reported that the current campus sustainability fund sent mixed messages. They said that the having to find a way for the fund to repay itself in a fixed set of years, sent a message that it was more about money than sustainability. Stating that they thought it was easy for labs with things like -80 freezers, but a lot harder for offices in regards to something like lighting. They also stated that the awards seemed very office dependent, with those offices who are in old buildings being severely disadvantaged against obtaining awards, due to the lack of sustainability built into them. Whereas offices in new buildings had to do little to get an award. Another office discussed how suppliers weren't brought into the awards and the output of the awards currently wasn't communicated to them. Lastly, one office mentioned that the awards were quite an isolating experience, that the communication of what other teams were participating wasn't really there and there needed to be more capacity for engagement, as this could be quite helpful to get ideas from others, and share what worked well for you.

Online survey

Lastly the brief results from the online survey will be discussed. Out of the four responses, only one office had not heard or participated in the awards. All believed that sustainability was relevant for their current role. Again it was just the one site who had not heard or participated that said that sustainability was not encouraged by their department, however this person also stated they would not be interested in participating. This is particularly unusual as they stated that they believed the awards did encourage sustainability and were one of the best ways to do so. No comment was left as to why they were not interested in participating though. One site that had participated though was critical of the awards and did not believe that it encouraged sustainability, stating that the awards did not appear to raise the profile of sustainability beyond those already being sustainable.

Limitations

One major limitation of these results are that it only came from sites participating, with sites not participating not completing the online survey, so the results and discussion are particularly biased in favour of sites who did participate. Despite this limitation these

interviews have provided valuable insight into what works well and what needs to be improved. While suggestions as to why teams would not participate were discussed above, future work is needed to examine what prevents teams from participating.

Outcome Objectives

The office Sustainability Awards had three relevant outcome objectives. These are Objective One: By 2020 15% of staff to participate through an office or lab awards, Objective Two: By 2020 20% of staff reached through exposure of those participating, and Objective Three: Awards continue to have value.

Objective 1 & 2: By 2020 15% of staff to participate through an office or lab awards.
By 2020 20% of staff reached through exposure of those participating

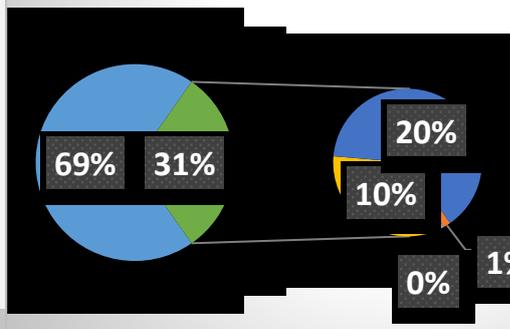
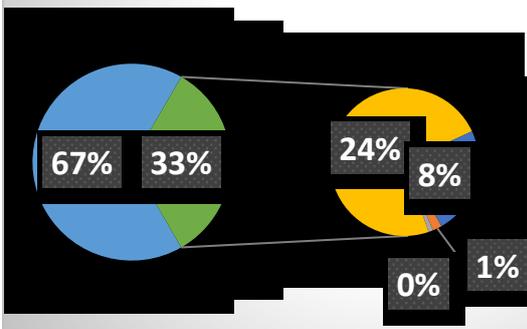
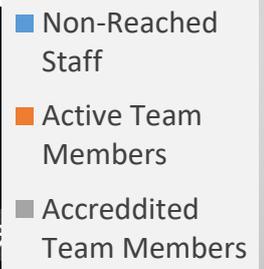
Objective 1 and 2 will be dealt with together as they contain the same figures. Before presenting the outcomes of these objectives, there are a number of issues to present that make the interpretation of these numbers difficult. Firstly before 2016 the SRS department did not collect staff participation figures, which makes the number of staff reached by teams holding on to their accreditation from 2015 blank. The number of staff champions is known, however, this is also problematic as it contains potential duplicates. Thus, for the 2016 accredited (not new) teams the figure of 45 is an estimate as it is based off of champion numbers (which might include duplicates) and does not contain team members who were not champions. Another issue is that before 2017 the SRS department did not collect a total figure of staff participating (it only counted team members), thus those who were champions but not team members were not counted in the total figure of staff for any figures prior to 2017 (including 2016 accredited teams for 2017). Lastly, the figures of staff and reached for teams holding on to their accreditation from last year used last year's figures, instead of the relevant figures for that year. Bearing these limitations in mind the achievement of these outcomes will now be discussed.

As can be seen in the charts below, the goal to reach 20% of staff through participating offices and labs was easily achieved with 33% of staff reached in 2016 and 31% of staff reached in 2017 through offices alone. While this is a good achievement, it suggests that the SRS goal was set too low. Conversely the goal to have 15% of staff participating through offices and labs is nowhere near being met with less than 2% of staff actively participating. While this does not include labs and the 15% does, this low percentage of staff

actively participating suggests that there is not much engagement from office staff. This overachievement in one metric and underachievement in the other points to an issue in what the goals metrics are, and points to caution in what metric is used going forward. It is suggested, while it does perhaps provide an overachievement, that staff reached is a better metric than those participating. This would keep in line with how the residence awards are measured, and makes more sense as sustainability initiatives impact those in the office rather than only those participating. Furthermore, if only team members are counted it ignores staff members who are not team members who suggest ideas (as reported above) or staff members

2016 Office Awards Staff Reached

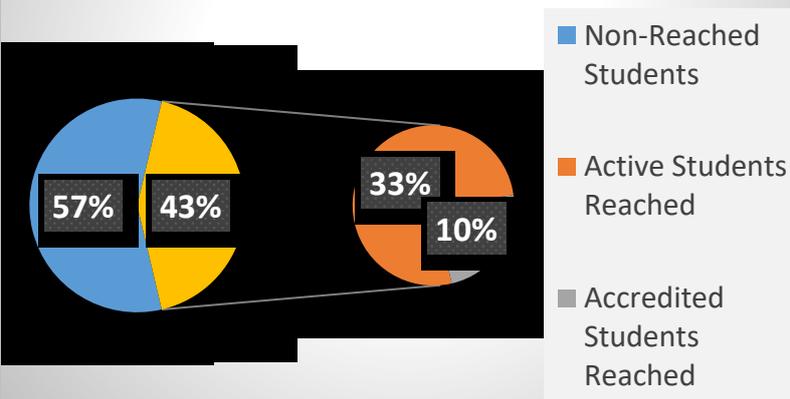
2017 Office Awards Staff Reached



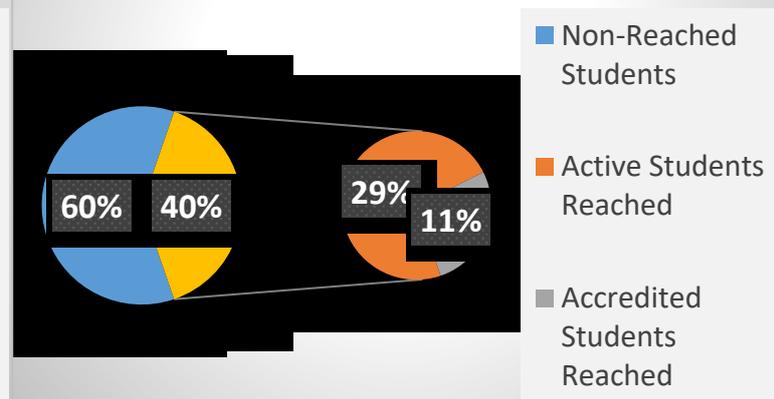
who participate in sustainability practices/activities but do not join the team. One issue to watch is the decrease in participation, while there is a small dip in reach, this decreasing reach is not something that the awards hope to achieve.

Lastly, although not a metric covered by this outcome objective it appears a useful metric to report nonetheless, and that is the number of students reached by the office awards. As can be seen in the graphs below the Office Awards are having a large reach in regards to students, reaching 43% of students in 2016, and 40% in 2017. This suggests that the awards are reaching quite a large number of students, which is a good achievement. However, there are two things to note. Firstly, there is a slight decrease in number of students reached, which is again not an ideal direction of the office awards. Secondly, this figure like the staff above is just those reached and does not include or measure those actively participating or engaging with sustainability.

2016 Office Awards Students Reached



2017 Office Awards Students Reached



Objective 3: Awards continue to have value

It appears that the awards indeed do continue to have value. This is evident from all sites being interested in continuing their participation in the awards, with one site even looking to expand their team. The awards seem to have increased sustainability across the board and made changes to the habits of staff who work within them. With some staff saying that sustainability push has increased sustainability in other areas and allowed them to start projects that are not being submitted to the awards. It was mentioned by a few that the awards even had continuing value outside of the expected sustainability framework, by bringing offices closer together and improving staff morale. Whilst this is not within the original scope of the awards, it is important to also acknowledge that the awards are having a greater value outside of what was expected of them. There does seem to be three issues that might impact the continuing value of the awards. Firstly, was support, whilst all the sites interviewed said they had support from above, it was acknowledged that without this support for some teams it would be impossible for them to participate. Thus, it is important that the SRS department continues its supportive work, especially in ensuring that teams receive support from higher up. Secondly, was that teams feel that with the current award structure, teams feel like they might have failed if they do not obtain the next level. A solution was proposed and had wide



spread support which is to introduce a continuation award for teams who consistently manage to be sustainable. This would help encourage continued participation, potentially reduce this feeling of failure, and provide continuing value into the future. Lastly, there seems to be an issue of unity/sharing between departments, whilst the awards have had a benefit of office cohesion, there was quite a drive for increased cooperation between departments. This might be a potential area to expand the awards into to increase the continuing value of the awards, by encouraging larger/widespread projects that would have a greater impact and hopefully achieve a university wide cohesion that offices reported amongst themselves.

Labs

Before describing what was done for this review, it is important to note that the SRS Department is trialling a new lab awards scheme called LEAF in 2018/2019. This review will not cover the work or success of this programme.

Methodology

As discussed above, this project aimed to assess all three levels of the Sustainability Awards for labs, these being students (who form the bottom), technicians (who form the middle), and head of labs (who form the top). By reaching and assessing all three levels this project aims to understand the relevance, efficiency, effectiveness, impact, and legacy of the awards for the students who form the majority of those affected, for technicians who run and organise many of the initiatives set out by the awards programme, and the head of labs who choose to and oversee the entire lab's commitment to the awards. In order to do this a series of interviews and surveys were conducted, as well as looking at those sites that participated and didn't.

Unfortunately, students could not be assessed due to the timing of this review was when all classes had ended, and students gone home for the summer. To assess the technicians', experience an online survey was sent out to an existing technicians list, from both sites that participated and did not participate. 14 responses came from technicians whose site had participated, 11 from those who had not, and a further 11 who were unsure. This online survey consisted of a mix of closed and open questions, and the full list of questions can be found in Appendix C.

Lastly, to assess the heads of labs invites for interviews were sent out to a semi-randomly (attempting to cover a range of award levels and length of participation) selected list of labs that had participated in the last 2 years. These were one-on-one semi-structured interviews with the structured questions found in Appendix C. Four interviews were conducted with heads of labs at participating sites. An online survey was also sent out to heads of labs who did not participate, this online survey was completed to varying levels by 5 heads of labs. The questions for this survey can be found in Appendix C.

Results

Heads of Labs

Heads of labs were interviewed from labs that participated at various levels. The semi-structured interview for heads of labs who participated was analysed and will be discussed below under the five areas targeted for the review, Relevance, Effectiveness, Efficiency, Impact, and Legacy. The surveys sent out to labs who did not participate received little information and will be briefly discussed at the end.

Relevance

Most reported that the awards were relevant in regards to fitting in with both the University's goal to be net carbon neutral by 2040 and into a wider environmental framework. However, one person was sceptical of the awards did, and whether they were relevant. Although they did state that the awards did make people take notice and become more aware. Furthermore, one person noted that the talk given by the SRS department made it clear how the awards were relevant to these tasks and labs. It was mentioned by a few that sustainability was very relevant to science as it produces more waste than other departments. Although some of this was unavoidable. In regard to their role specifically, three of the four heads of labs interviewed reported that the awards were highly relevant to their role, with one reporting that it was becoming more relevant. One did report that it was on top of their role though, but that there was no one else to take on the job. Lastly, the criteria of the awards was for three of the four highly relevant with few not being relevant to that specific lab, with none stating anything was missing. One went so far as to say half of the tasks should be completed anyway as part of good practice. The one person who stated some doubt about the criteria said that although there was stuff on a day to day task, the nature of science made it difficult to reduce all waste. They further went to say that one of the issues with the criteria was that they were very limited in what they could do due to their building being very old. This limited them from achieving higher than bronze they felt and made them stuck in a cycle of doing it just for the sake of doing it. This last lab also gave some interesting insights into why teams might not participate or the struggle of participating. Asides from older facilities, it was found that it was hard to convince people to throw away equipment that was unsustainable but was working fine, this was also mentioned by another lab. They also pointed out that it was hard to gather a team together from the labs as opposed to the offices. This is problematic when you have a single person leading the team who is soon to retire.

Effectiveness

For the effectiveness of the awards four broad themes came out, these were the auditing process, people, online materials, and the awards themselves. These four themes will be discussed in this order.

Firstly, the auditing process was all the labs reported that the process was very effective. It was found that having other lab staff auditing rather than students was particularly effective, as it was felt students did not know enough about the running of a lab to audit properly. With one reporting when they had a non-science based student audit it was very ineffective. Furthermore, it was found that the audits being conducted by other lab members was very effective as it allowed a mutual sharing of ideas. With those being audited learning from those auditing them, and vice versa. Anecdotally this was something I saw when I attended one of these lab audits.

The second area of effectiveness discussed was other people. This was generally found to be an area where the process was ineffective. One issue of ineffectiveness was the high turnover staff that was reported by one lab. They stated that by having many people on short-term contracts (including postgraduate students) made continuity quite difficult as enthusiastic people would leave regularly, and there would have to be constant retraining of new incoming staff. Although this was mentioned as a potential positive to preventing people from getting entrenched in their ways. This leads to the second reported issue was that people were entrenched in their ways. It was found that other scientists in the labs were quite stuck in their ways and did not like change. For some it was because it allowed stricter control over the materials being used (e.g., knowing that no one else has contaminated your stock) for others it appeared to be attachment to old equipment, perhaps out of change possible interfering with replication. It was reported by two labs that it was very hard to get people to change their habits. It was found though that people did share some resources which helps sustainability. This differs between departments quite a lot though and depends on the substance.

Another area of effectiveness discussed was the current online materials. Overall people reported that the online materials were very effective and a good resource to have. One thing that was mentioned as a possible improvement was having case studies of what other labs are doing for different criteria, as this would provide guidance for any teams

struggling or looking for inspiration. A few other minor things were mentioned by one person, which was that a yearly planner would be good. They also found that the posters and existing timeline were really effective. They said that anything that got more people involved would be good, whether this was changing posters regularly so they're eye catching, or having more interaction with people who have participated or the SRS department. Lastly, it was mentioned that having posters or other notices that pushed the nudge culture would help.

The effectiveness of the awards themselves were also discussed. One lab said they felt that the lab awards perhaps did not capture the small things they did for sustainability, only the big ones. One other issue about the awards effectiveness was brought up at an audit. This was the gold was currently an issue for labs to achieve, but for different reasons. If one has a lab that is too small it becomes unachievable due to lack of time or staff. Whereas for large labs it was also unachievable as there were too many sub-labs within to meet all the criteria. This was similarly discussed with another lab who felt that the age of their building prevented them from achieving higher than bronze. Whether the awards recognised the work of staff put into the awards was discussed. There was some mixed response here. One lab stated that they probably took some of the credit that should have been given out to technicians, whilst another lab felt that the people actually doing the hard work are not necessarily recognised. However, these labs did also say that the awards did still recognise work put towards it, and that the special awards recognised if a member of staff did a particularly large project. One other person found that the awards did indeed recognise the work, and by attaching it to the lab made it more inclusive to the group, and that this was good because at the end of the day everyone is needed to be sustainable.

Lastly, although not covered by the awards directly the effectiveness of other programmes was discussed. The sustainable campus fund was said to be very effective, and that the work done by the SRS department to do the calculations was very good. One lab was just uncertain how many people were using this fund or were aware of it. One lab brought up warpit, saying that it seemed more effective for offices than for labs, and that they struggled to get rid of lab equipment or get lab equipment.

Efficiency

The efficiency of the lab awards was discussed under the two main themes of the workshops and the submission process. Overall the workshops were mentioned as a good resource. It was found that the talks given by a staff member (name redacted for confidentiality) were found to be really efficient for getting feedback and getting people engaged with sustainability and the awards. They were seen as useful for also generating ideas and inspiration. One lab in particular mentioned they saw a big change in behaviour after a month of workshops that snowballed into other areas, which they and others found very efficient. Although two of those interviewed did mention that they were not able to attend every workshop due to other work commitments and lack of relevance in some workshops. The submission process was also discussed in its efficiency. Overall the process was found to be very efficient, with all stating how easy and quick the process is. One lab mentioned that they had some difficulty to start with the system, but once they got used to it, it was quite easy. Lastly, one lab who had seen the old system before stated that the new system was certainly an improvement.

Impact

The impact of the awards was discussed in multiple areas. The major area discussed was the changes that the awards had made for the labs. It was found that working with the sustainability department, particularly through the campus fund, allowed purchasing of more expensive but sustainable equipment. It was found that heads of departments were happy to provide money for these sustainability purchases, especially when the campus fund helped pay for a large aspect of it. Building on this it was also mentioned to make one more aware of the energy use of equipment that is bought and taking this into account when purchasing. Although as mentioned before, some do find there is an issue with getting rid of unsustainable equipment that still works. Most labs mentioned that there weren't any major or only a few changes that were needed to meet the criteria. It was also stated that there were a number of criteria that were already being met. However, the awards did help streamline certain aspects of sustainability that were being done. Furthermore, it introduced better monitoring or note taking of sustainable practices that were done informally before, such as monitoring freezer use and stock levels, and lighting. One lab said particularly that any changes that were made for the awards made sense and should already have been done. The awards were also found to make people more aware of sustainability through increased



training on the topic, which led people to be more aware of sustainability in the labs, and areas that weren't actively thought about (e.g., waste streams). It was seen that the awards had a positive impact on making labs more sustainable.

Another issue discussed was whether the awards incentivised change, or if it just recognised practices that were already being done. One lab indicated doubt about the awards actually incentivising change, saying that the awards weren't there particular cup of tea. Instead they believed that the visibility of the SRS department and the pushing of sustainability by them and the University were more important to incentivising change. Others found that the awards did provide an incentive. One stated it provided them a direction for what to look for in regards to sustainability. It was also found to be a bit of both which was seen as good. It was mentioned that sustainability is becoming more important throughout the University which is putting a greater emphasis on it, and the awards act as a positive way of funnelling people towards sustainability and the University's goals. Especially as it rewards people for doing so, providing another reason to change, and to work with others.

Lastly, the impact the awards have had on one's self was discussed. Most of the people interviewed stated that the awards had had a positive impact on themselves. It helped individuals become more aware of sustainability in their work, and prepared them for different aspects of their roles, in particular facility management. It was mentioned that it was nice to work with others towards a greater goal of being net carbon neutral by 2040. One lab mentioned that the amount of kudos they had gotten from participating was very nice to receive both for themselves and their lab. With one individual stating it allowed them to bring some aspects of sustainability to their personal lives. For one individual they were given a position on another committee because of their work with the awards. Lastly, one individual did state the awards probably did not have much impact on their future career, because they were at the end of theirs. But they did state that it was probably useful for younger members of staff to build up their resume.

One quote summarised quite well the overall feeling of the impact the awards had had "Just generally nice to be known for doing and being involved in these things. There's been no negative impact on how we're working, it's not slowing us down, or costing us anymore. It was a bit getting used to new practices, but once they're there, they're there."

Legacy

The last area discussed was the legacy of the awards. Firstly, all labs interviewed stated that they would continue participating with the awards in the following year. It was seen as an important programme to participate in for students, and for the energy saving potential it provided. One lab mentioned their future optimism for doing more, and having a greater impact in regards to sustainability within the larger community. There were a few obstacles mentioned that would prevent continuing in the awards. Firstly, as mentioned above building constraints was seen as an issue for one lab. It was also felt that their lab didn't fit well into the heavy focus on freezers, as their samples didn't fit the mould well for this.

The legacy of the structure of the awards was also discussed. Overall it was seen that the current awards structure did provide continuing value. There was some areas of improvement though. Firstly, one lab suggested that there needed to be some reward for sustained effort to keep people interested. Their suggestion was priority of extra budgetary funds to reward continued sustainability. A few people also thought the continuing service award would also be good, to reward those who had showed continued commitment to sustainability. One lab did like the idea of a fourth level to the awards, but no others showed support for it.

The future of sustainability out with of the awards was also discussed. It was stated by all bar one lab that they were likely to continue being sustainable even if the awards were not there. With the one stating they wouldn't saying they weren't convinced sustainability would be on the front foot if it weren't for people interested in it looking to promote it. One individual expanded upon this drive for sustainability stating that sustainability was being pushed by the world. But more specifically the University, the SRS department, and even funding bodies and procurement are pushing sustainability. That you no longer have to look for the cheapest price but have to take into account the waste it produces, which has led to waste reduction already in their lab outside of the awards. They said that there was a definite shift over the last 15 years towards sustainability, although they weren't sure how much this was due to the awards. This was reflected by another lab that pointed out that sustainability was becoming more important, and that the awards were an important tool to maintain this focus on sustainability. And that the awards and the SRS department are instrumental in this continuing, especially with labs that can have a high turnover of staff. The sustainable campus fund was also said to be instrumental in continuing this legacy of sustainability, as

the money being saved through this initiative and the subsequent material is making higher ups and other people take notice. One lab was uncertain how much of a sustainable legacy was being left for the students, but stated that it was definitely felt by the staff. Another individual stating that the awards definitely had a legacy of sustainability within their own life.

Lastly, a few future ideas for the legacy of the awards was suggested. One idea was to continue with the sustainable campus fund as it was seen as a carrot approach that encourages sustainability where it might not have been fundable before. It also appears to be attracting people who wouldn't be interested in sustainability per say to participate if it means new equipment. Another suggestion was to focus on short key messages about sustainability every 2-3 months, outlining projects and what's been happening with sustainability. It was suggested that an abundance of emails can turn people off to not read the information. Another idea was to marry sustainability to other important areas, for example safety, is a benefit as it ties sustainability to something that can't be forgotten or neglected during busy workloads. Lastly, it was suggested that going after lab managers and technicians for sustainability practices was a good target as they have an overarching understanding of things, but also look after a lot of things, and unlike students don't get focussed on their own work.

Non-Participating Labs

For those not participating the full range of themes was not assessed, as the effectiveness and efficiency of the awards was not relevant to those who had not participated.

The relevance of the awards was assessed in multiple ways. Firstly, all those who responded had heard of the lab Sustainability Awards. Four out of five (75%) of the responders said that sustainability was a relevant concern to their work, with the last reporting they did not believe it was. In regards to whether sustainability was part of one's job description, only one responder stated it was. Despite this two out of four (50%) responders said that the Sustainability Awards were relevant to their work in the lab, with three out of four (75%) stating that they would encourage those working with them to participate, with the last responder saying they may or may not. Lastly, two open ended questions were asked about the relevance of the awards. To the question about what obstacles prevented participation all three responses (100%) mentioned lack of time was an issue. One

person expanded on this that it was also a lack of personnel. Sustainability was seen as one of several competing priorities that's benefits were long term and aspirational, compared to direct research output. It was stated that senior staff were reluctant to allow other staff to take part in these [awards] "non-productive" activities. Another stated it was hard to get people to save energy in their daily routines due to Estates being unable to manage the heating/cooling system in the building. The second question asked participants what needed to be changed to make the awards more accessible and relevant. All three responders gave different suggestions. One suggests a smaller scale option for the awards at a lab or even floor level, rather than a building level. Another suggested more incentives or tangible benefits, and for senior staff to promote sustainability more. Interestingly the last comment demonstrated this issue by stating that it wasn't about an issue of accessibility, but that they'd rather be working on large scale projects with significant returns.

Lastly the impact/legacy of the awards was assessed. Only two respondents answered these questions with a 50/50 split on whether they believed the awards encouraged sustainability. There was open ended question that asked participants why they believed this. One stated that it was good at raising awareness. The other who said they didn't believe the awards encouraged sustainability stated that the hidden costs of electricity and heating for labs and PIs made people less sustainability, and if made aware of there would be a much bigger push for sustainability. Although both reflected less belief in the awards just recognising practices that were going to occur anyway.

Technicians

In order to assess the middle level of workers in labs (technicians) an email was sent out via a technician email list. This asked technicians to complete an online survey via Qualtrics. A total of 38 responses of varying levels of completion was received. Of these 38 responses 16 (42%) of technicians indicated that their lab had participated in the Sustainability Awards in the past 2 years. 11 (29%) indicated that their lab had not participated, with a further 11 (29%) indicated they were not sure. Those who were unsure or knew they had not participated were asked questions in related to relevance and impact, as the other areas would not be relevant to them. Those who indicated they had participated were asked questions about all areas. The results of this survey will be discussed below.

Relevance

Participated

It was found that most participants (9/14; 64%) agreed that the Sustainability Awards fit into the University's goal to be net carbon neutral by 2040. Only 2 (14%) said it did not, with the remaining 3 being uncertain. It was similarly found that technicians did believe the awards fit into a wider environmental framework (8/14; 57%). However, there was more uncertainty over this with 5 (36%) of technicians being uncertain if they did. It was also found that the tasks were found to fit within technicians' roles (8/14; 57%) and were appropriate (7/15; 50%). However, there was great uncertainty over whether the tasks were appropriate.

A follow-up question asked participants if they would like to expand upon these answers, which 4 technicians answered. Two responses discussed waste due to inefficient systems, one focussing on wasting 4 tonnes of water every day of the year due to inefficient cooling, whilst another focussed on the lack of recycling for lab plastics. One response discussed that it was a lot of work to fill out the forms, and suggested it be a tick-box for criteria except for special projects. Lastly, one response said they were explicitly told not to submit themselves but join or make suggestions to the existing sustainability committee.

Most technicians (8/13; 62%) reported that their manager/head of lab provided enough advice and support with pursuing sustainability. Again, a follow-up question was asked, which 2 technicians (who had responded no) expanded upon. One technician found that they put effort into writing papers to get the award but did not follow up with action. Another found that it was difficult to communicate information, and that a short tick box sheet for each area would be more helpful. It was also mentioned they found they saw no support from senior management which they found made it hard for lab managers to communicate sustainable practice.

Non-Participants

Of those who had not participated the clear majority of them had heard of the Sustainability Awards (18/21; 86%). After briefing technicians, the details of the awards, they were asked if they would participate in the lab Sustainability Awards. This was a very close answer with equal number of respondents saying they would and would not (8/22; 36%), and a similar amount saying maybe (6/22; 27%). The lack of enthusiasm for joining



though was not due to a lack of the importance of sustainability as 20 (91%) of technicians said sustainability was relevant concern to their work, and 15 (68%) said the awards were relevant to the work conducted in their lab. The next few questions attempted to clear this up, asking how they could be more relevant to their lab (2 responses), what was preventing their participation (11 responses), and what changes need to be made (7 responses). These qualitative responses will now be discussed.

How the awards could be made more relevant, both responses stated that they knew nothing about the awards or their function. One technician though expanded and stated that one of the main “sustainability” issues at the University was a lack of sustainable technical staff, believing that the role is being eroded and lacks training or development and suggested a low morale amongst technicians. Although this issue appears to be outside of the scope of this assessment, it was mentioned by one head of lab in an interview that they had noticed that technicians who were dedicated to preparing materials (glassware) were being removed in favour of plastics. This does link back to sustainability in that there might not be enough staff to carry out sustainable practices.

There were a number of obstacles that were preventing participation. The first obstacle that was mentioned by a few technicians was a lack of awareness of the awards and their criteria. Another obstacle mentioned by a few was lack of time due to other priorities such as research being of greater concern. There were a few other obstacles that were mentioned by individuals. One reported that they did not feel like they could participate as they had no say over what happens in the building they work. Another felt that the nature of science was an obstacle (acids and 24/7 running fume cupboard). Lastly, one was very critical of the awards seeing as a box-ticking exercise to make the University look good rather than making actual sustainable changes.

Lastly, technicians were asked what changes need to be made to make the awards more accessible. The main change that was stated was a greater information on the awards, how to sign up, and the benefits of participation. One technician stated that they wanted to see tangible reductions in trash from the awards, whilst another believed there were far more issues that needed to be addressed first.

Effectiveness

Technicians who said their lab had participated were asked a series of questions about the effectiveness of the labs. All indicated that the auditing process was effective and fair, and that it was beneficial to have it completed by other labs rather than students. The three qualitative responses that expanded on this answer all mimicked this saying that they were unsure if people who did not work in labs would know what to look for, with one stating it was also an effective way to share good practices between labs. Most technicians (6/9; 67%) found that the current materials provided by the SRS were effective in pursuing the awards. Of the three who disagreed, one stated that they were unaware of what the process was, unfortunately the other two did not explain why they were not effective. Similarly, most technicians (8/10; 80%) believed that the awards were effective at recognising the contribution of technicians to sustainability. This was expanded upon by two technicians, one stated that it was generally systems in place that contribute to the awards rather than individuals per say. The other person felt that whilst they were slightly effective, some technicians might disappear into the background due to an existing committee, and also questioned whether technicians knew it was something they could participate in.

Efficiency

Technicians who participated in the awards were also asked about the efficiency of various processes. The first area assessed was the submission of evidence. There was a split here, with 4 (40%) of participants saying it was an easy process, and 5 (50%) saying it was not. Technicians were given the option to expand on this answer, which 3 did. One who had reported that the current process was easy suggested that there was a high drop out from the awards as after the initial award was completed, a lot of information had to be re-submitted when going for the awards again. They suggested that it would be better after the initial application, that a site visit every 2 years to review the processes and systems are still in place would be more efficient. The other two had reported the process was not easy, one of these stated that they had no idea what the process was (which brings the above statistic to a 4/4 split on the easiness of the process). The other technician believed that it was very time consuming, especially considering the marginal time they had. Little information was gathered on whether the workshops and programmes were efficient at helping achieve sustainability goals with 6/9 (67%) of technicians being unsure of its usefulness.



Impact

Participated

Technicians were asked if the awards provided an incentive to act sustainably or if they just recognised existing practices. There was quite a range of answers to this. Some believed that it only recognised (2/8; 25%), with some believing it did both (3/8; 38%), and with others stating that it did incentivise especially as one did not want to drop a level in the awards (2/8; 25%). The last individual indicated that people were not aware of the awards. It was also asked whether any projects or changes had to be made in order to qualify for an award. Most indicated (5/6; 83%) that they had had to at some point in the process, even if these were small changes or formalising practices. One individual stated though that they were at the point where it was difficult to make changes that would not significantly change work practices. A range of responses were given about whether the awards had had any impact on their lab or work. Two individuals stated that there had not been, with another three stating there was some impact. One individual indicated that the sustainable practice was now a safety hazard. On a more positive impact, two individuals stated that it made them more aware of sustainability in their lab and changed their habits to be more sustainable. Lastly, technicians were asked if participating in the awards had any impact on their job satisfaction or career development. Most indicated that it did not (4/7; 57%), with only 2 agreeing that it had a positive impact (2/7; 29%).

Non-Participants

There was quite a large split on whether the Sustainability Awards were likely to encourage sustainability. Although it did favour that it would encourage sustainability with 10/16 (63%) stating it would. Participants were given the option to further expand on their answer. Of the two had stated that the awards would encourage sustainability, one believed it would mostly be preaching to the converted but it should still be pursued. The other believed it would encourage sustainability only whilst the lab is participating and only if participation was pushed on all lab members. The three remaining responses were from those who stated it would not encourage sustainability. A variety of answers were presented including it being tick box exercise by the University, that it would only increase the workload of already

stretched staff, and that an award was unlikely to sway those who didn't care about sustainability, only a publication might.

There was a similar split over whether the awards just rewarded practiced that were going to occur anyway. Most of the people were unsure (8/16; 50%), with some saying it did just this (4/8, 25%), and some saying no (4/8; 25%). Participants were allowed to expand upon this answer. One who responded maybe believed that some people would work sustainably regardless of whether being awarded or not. Of the other two who said no, one continued their belief from the previous question that unless it's pushed people won't make any effort. Lastly, one felt awards recognised only those who "shout, or boast loudest" and those who quietly do their work are ignored.

Legacy

Lastly, the legacy of the awards was discussed with those who had participated. There was some uncertainty over whether the current structure provided continuing value with 3 (30%) indicating it did, and 3 (30%) indicating it did not, with 4 (40%) being unsure. However, the majority of participants (6/9; 67%) stated they would continue participating in the awards, and that the awards encouraged acting sustainably in the future outside of the awards (6/10; 60%).

Both those who had and had not participated in the lab awards were asked a final question of whether they had any comments. The responses fell within the legacy or future of the awards. For those who had participated there were suggestions of ways to improve the awards. These were focussing on university wide issues, addressing supplier issues, and monitoring the waste recycling points more frequently. Another said that they had a sustainable committee who talked about the awards, but that they saw no action being done for them. For those who had not participated, one believed that science and sustainability did not go hand in hand. Whilst another said they tried to balance sustainability and performance, but felt that they would not be bribed (by the awards) to increase their workload.

Discussion

A range of feedback was received at all levels. Overall there tended to be a desire for sustainability, with those who participated enjoying the awards. However, there were some criticisms from the awards particularly from technicians, were support for the awards varied. The overall findings will be separated and discussed under the headings of Relevance,

Effectiveness, Efficiency, Impact, and Legacy, with a final discussion on whether the outcome objectives set out by the awards has been achieved.

Relevance

Overall most people believed that the awards were relevant to the University's goal to be net carbon neutral by 2040 and fitting into a wider environmental framework. This was more pronounced in the head of labs who were participating with only one person doubting whether the awards were relevant to this. Whilst technicians were less certain of the relevance of the awards to this goal and wider environmental framework. This suggests that the awards are relevant to these goals, but that the information for how or why is not being filtered down enough. Similarly there was widespread belief that the awards were relevant to science and their role/work in the labs. This was more pronounced in this labs who participated, however it was still high in those who were not participating. In fact the majority of labs not participating had heads of them reporting that they would encourage their team to participate. This suggests that sustainability is seen as highly relevant, and is not the obstacle that is preventing teams from participating.

The criteria's relevance was also discussed. Overall it was found that the criteria did seem to fit within the work done in labs. One head of lab went so far as to say half the tasks are completed if you follow good practice. However, one head of lab expressed doubts about the criteria. They expressed that although sustainability was involved in day to day tasks, the nature of science was sometimes at odds with sustainability. Furthermore they expressed that working in buildings with older facilities meant that many of the criteria was unachievable for them. However, despite this belief amongst heads of labs participating, technicians when presented with a description of the awards were highly split on whether they would participate or not. This suggests that despite the criteria being relevant for some, there are factors that prevent people from participating.

A look into what obstacles prevented people participation was conducted, which revealed a variety of reasons. Firstly, one was mentioned above is the facilities. It was felt that those with older facilities were stuck at lower levels of the awards, with little to no chance to improve their position. This is highly problematic as it means labs in older buildings might not be participating, despite their being perhaps a greater need for sustainability in these unsustainable buildings. Another major issue brought up by those who

do not participate (both heads and technicians) was simply a lack of time. Sustainability was seen as one of several other demands, and found that these long term outputs weren't as favoured as "productive" activities like direct research output. Although most technicians did report their manager/head of lab did provide enough support and advice when pursuing sustainability, this still seems to be a problem area that can be improved to make the awards more relevant. Lack of knowledge seemed to be an issue for some (those not participating), but this seemed be less of an issue amongst those surveys. Lastly, the other major obstacle mentioned by a few were facilities and equipment. It was mentioned that there is less drive to throw away old equipment that whilst unsustainable still works. It was also stated that it was hard to be sustainable when some equipment has to be run 24/7, but also when facility management is causing large waste in both water and electricity usage.

Lastly, there was some discussion on what changes needed to be made to make the awards more relevant. The primary way was to increase knowledge specifically of the criteria, whilst most had heard of the awards, it was seen that the finer details were not well known and could be better communicated. Especially how participation in the awards provided benefits similar or equivalent to direct research output.

Thus, whilst overall sustainability and the awards are relevant, greater work needs to be done in communicating how the awards and the tasks for it are worthy of time, and should not be side-lined. One way to do this might be to suggest ways of how this work could have direct impact on research output, whether that's papers themselves or improved efficiency or effectiveness of their lab work.

Effectiveness

The effectiveness of the awards was discussed between heads of labs and technicians who had participated in the awards. Firstly, there was universal support and agreement on the effectiveness of the auditing process. Many felt that students would not be able to conduct the audits effectively, as they were simply by naïve to the processes involved in organising and running labs. Many also mentioned that it was a very effective tool at sharing best practices amongst labs. This is one benefit of the awards that cannot be understated, as the sharing of these sustainable process could produce rapid change across many labs towards sustainability. Although not mentioned by any, an online space where these best practices could be shared earlier and wider might be effective at spreading this information.

The effectiveness of the online materials was also discussed, overall most technicians and heads of labs felt that these were sufficient and effective. Whilst the technicians did not provide any suggestions on improvement to these materials the heads of labs presented some. One suggestion was to provide case studies of what other labs had done for certain criteria, which would provide teams who were struggling with some ideas. This fits well with the fact that teams find auditing effective, as it allows a sharing of ideas. This further suggests that an online platform to share these case studies (especially if some are already provided when submitting) would be an effective online material to have. Some minor additions were also suggested, including a year planner, and posters that promoted the nudge culture of sustainability.

Overall it was felt that the awards recognised the work put in by people towards sustainability. It appeared that there was less agreement from heads of labs on this than the technicians who participated. With doubt being mentioned by two heads of labs over whether those putting in the work (technicians) was recognised. One technician said a similar thing stating that some technicians might disappear into the background when there is an existing committee. On the whole though it was felt that the awards were effective at recognising effort put towards the awards. Further results from the heads of labs revealed some areas of ineffectiveness within the awards themselves. It was found by one head of lab that the awards did not capture the smaller things done for sustainability only larger ones. It was also felt that the criteria of the awards was ineffective at catering to different types of labs. It was found in an audit that gold was hard to achieve due to size, for both large and small labs. Similarly, as mentioned already in the relevance of the awards, it was felt that the building one was in prevented people from effectively participating.

Another area of ineffectiveness that was identified was amongst people themselves. One issue was that there was a high turn-over of staff in labs, which made continuity difficult as there was a constant training of sustainability to new staff, and enthusiastic people leaving. While this had a potential positive of preventing people from getting entrenched in their ways, it is problematic for labs that are struggling to get team members. However, it was found that people getting entrenched in their ways was another problem that was mentioned. This was found to be problematic as it meant people were unwilling to change their practices to be more sustainable, or get rid of equipment that was unsustainable.

Lastly, although not directly related to the awards, the sustainable campus fund and warpit were brought up. It was found that the sustainable campus fund was seen to be very effective, especially the work done by the SRS department in helping with this. However, warpit was seen as less effective for labs, and was seen more office focussed.

Thus on the whole the awards are seen as effective. Some processes are seen as very ineffective with no change needed, auditing primarily, whilst other areas needed some work to be made more effective.

Efficiency

The efficiency of the awards was again only discussed between heads of labs and technicians who participated. It discussed two core themes. Firstly the efficiency of the submission process was discussed. For the heads of labs the submission process was seen to be very efficient, being an easy and quick process, with one lab manager stating surprise that anyone would drop out because of them. One lab did have some difficulty initially, which suggests perhaps some assistance is needed for newer teams. One head of lab said that they had seen a huge improvement with the new system, suggesting that the efficiency of the system has only improved. However, amongst technicians it was less clear cut, with half believing it was efficient and the other half not. One individual who said it was efficient, said there was a high dropout rate of for repeating teams as a lot of the information was the same but had to be re-submitted. With another technician stating the process was very long. This suggests that there is a large gap between heads of labs and technicians and how easy it is to complete the online process. There is no apparent reason for this though.

The other area of efficiency discussed was over the workshops and programmes run by the SRS department. Amongst heads of labs these were seen as an efficient use of resources, especially with getting feedback and getting people engaged with the awards. They were also seen as useful for gathering ideas and inspiration going forward. One lab mentioned that they saw a big change in behaviour after a series of workshops, which snowballed into other areas of behaviour change. Little information was provided by technicians on the programmes and workshops except for most being unsure of their usefulness. This might be an issue of communicating to technicians the usefulness of these workshops, especially if they are being pressed for work and time commitments from senior management.

Impact

The impact of the awards or potential impact was discussed among both heads of labs and technicians who participated, as well as those who had not participated. One major area discussed amongst all of these groups was whether the awards incentivised sustainability or if they just recognised existing practices. The response to this was varied across all levels. At the head of labs level there was a mix of responses. Some expressed doubt about the awards incentivising change, one suggesting that the SRS department and the push to sustainability from the University had a greater impact, with another suggesting that if the hidden costs of electricity and heating for labs was made for PIs sustainability would be pushed for more. However, others believed it did encourage sustainability, providing direction for what to do and look for. Lastly, some believed it was a good mix of the two and found that the more incentivise there are to get people to change the better. Amongst technicians the same was found with people splitting fairly equally over whether it would encourage sustainability, just recognise it, or both. Qualitative responses did not reveal any particular trends, with mostly individual reasons that did not cross over. What this does suggest though is that there is quite a range of beliefs on the awards. However, this is not necessarily a problem, because if the awards do recognise existing work it might be seen as something that can be easily achieved, thus reaching a foot in the door. Similarly if the awards incentivise change for sustainability this is also a good thing, as it's pushing things forward. An ideal position might be the middle approach were it recognises existing work, giving teams an easy way in to the awards, which then incentivises them to make changes elsewhere.

The remaining areas of impact came from those who participated. Overall it was found that the awards or through participation in the awards had had an impact on their work and lab amongst all heads of labs, and most technicians. One area of improvement was through the sustainable campus fund which had allowed purchasing or more sustainable and newer equipment that might have been out of the budget initially. This was found to have a knock-on effect with heads of department being very happy to provide some funding for sustainable purchases when this fund paid for part of it. Another area that was mentioned by both heads of labs and technicians was that through participating they had been made more aware of the issues of sustainability in their work, and how to work more sustainably. Most found that it was mostly small changes being made, or formalising or creating better record keeping of practices that already existed. One lab in particular pointed out that all the changes

that were being made, made sense. There were some issues mentioned though, although these were one off, one person mentioned that the sustainable practice put in place was now a safety hazard (but provided to further explanation). The other issue was that the lab felt like they had achieved everything they could for sustainability without making major changes to work practices. Thus, overall it seems there is a widespread positive impact of the awards in both actual work practices but also the mind-set of the individuals who work in them. Although it might be a bit problematic that one has reported a ceiling effect of their sustainability efforts.

The last area discussed in terms of impact was the impact the awards had had on individuals themselves. Amongst heads of labs there was widespread agreement that the awards or participating in them had had a positive impact on themselves. It was found to help individuals become more aware of sustainability in their work and prepare them for different roles of their job. One individual mentioned that they had received a lot of kudos for their work, and as a result was put on another committee. Whilst another said it even brought sustainability home with them. The only individual who said it probably didn't have much impact on their future career stated it was because they were retiring soon, but that it would be good for younger members of staff. However, the technicians mostly reported that it had no impact on their job satisfaction or development. This demonstrates that there is a clear positive impact for the heads of labs, but these positive benefits are not being felt by technicians. This is an area of opportunity to expand the awards by making the positive impacts more aware to technicians, whilst ensuring that there are positive benefits for technicians who work towards sustainability.

Legacy

Again, only those participating in the awards were asked questions in relation to the legacy of the awards. Firstly, all heads of labs and the majority of technicians indicated that they would continue participating in the awards. It was seen as an important programme and one that saved energy by the heads of labs, with one lab having optimism for expanding the awards in the future to have a greater impact on the larger community. One head of lab reiterated that building constraints might be an obstacle to future participation as well as the heavy focus on freezers that their lab didn't fit well into. Whilst this is good that most agree they will continue, these obstacles might prevent some teams from continuing. More importantly though is that it gives a potential insight into why some teams might have never



signed up. Work needs to be put in that considers how the age of the building and the subsequent sustainability constraints can work with the Sustainability Awards, to ensure those labs that most need sustainability are not put off. Another potential legacy problem of the awards was noticed, which was that small labs or labs with a small team can suffer quite problematically when one member retires. This was especially noticeable with the one lab I talked to who was the only lab member pursuing the awards and was retiring in 2019. This is continuation problem is something that could adversely affect the awards programme going forward.

The structure of the awards was found to have continuing value by all the heads of labs. However, there was quite a strong divide with technicians with equal amounts saying yes, no, and maybe. Again, there appears to be a problem with filtering down the positives of the lab awards to technicians, and this is one of the areas where the greatest improvement can be made. Some improvements to the award structure were discussed with the heads of labs. There was support for a continuing service award to reward those showing continued commitment to sustainability. One lab went further and suggested that labs who continue efforts for sustainability should be considered a priority for extra budgetary funds. This would reward labs for being sustainable and highlight that the higher levels of the University support sustainability. One lab liked the idea of a fourth level of the awards, but again there was not widespread support for this. This further solidifies the findings from offices and residences, that there is widespread support for recognition for continued services.

The legacy of sustainability out with of the Sustainability Awards was discussed. Most believed that the awards encouraged acting sustainably in the future even outside of the awards. Other heads of labs stated that they did not believe they would be on the front foot if people weren't promoting it though. Another head of lab said that this drive for sustainability would continue because it's being pushed by the world, the University, the SRS department, and even funding bodies. They said sustainability was becoming more of a consideration and not purely price anymore. It was believed by one that the awards, the SRS department, and the sustainable campus fund were instrumental in this continual push. Although one head of lab stated uncertainty of how much of a legacy was being instilled in students, they found it was the case for staff and even in their own home life. This shows that there is indeed a push for sustainability being felt by labs continuing forward, but that these awards are a useful tool to keep pushing it. However, there is some uncertainty whether students are being affected,



and this is one key area that the awards are uniquely placed to tackle within a university, by impacting future generations of scientists. Problems of the awards and sustainability were also pointed out by two technicians. One felt that science and sustainability were fundamentally incompatible with each other, whilst another was very negative saying they would not be bribed by the awards to increase their workload. This again shows that technicians and their issues with the awards is a key area to tackle.

Lastly, there were some suggestions for the future of the awards by both heads of labs and technicians. Two were in the theme of how to attract more labs, this was done by the sustainable campus fund as they believed it dragged people into sustainability with new equipment. The other was to marry sustainability with other important areas like safety, this would ensure it could not be put aside when busy. It was also said that this drive should be placed on technicians and heads of labs as they were the key people to aim sustainability towards due to their wide reach and greater focus than students. This could be done through short key messages as suggested by one head of lab. Technicians suggested that there should be a greater focus on university wide issues, suppliers, monitoring of waste.

Outcome Objectives

The lab Sustainability Awards had three relevant outcome objectives. These are Objective One: By 2020 15% of staff to participate through an office or lab awards, Objective Three: Awards continue to have value, and Objective Eight: Maintain links with green impact appropriate to University business needs, setting up, and running “Engaging Edinburgh Through Green Impact”

Objective One: By 2020 15% of staff to participate through an office or lab awards

This outcome objective is shared with the office awards. However, although there have been attempts to capture this information before, it has relied on teams to voluntarily fill in this information. Only a few teams have filled in this data, and this data is often a rough guess. Thus, no conclusion can be met about whether the lab awards are meeting this criterion or are on track to do so. Greater information gathering is needed to accurately assess this criterion, perhaps through working with the relevant departments who have this information already. If it is like the office awards though the lab awards might be severely underperforming on the number of staff actively participating, but reaching or exceeding this number if it includes people potentially impacted by the awards (e.g., a team of 15 might be

influencing a lab of 100). Similarly, it would also be useful to measure the number of students potentially reached by these labs. Work needs to be put into exactly what is desired from this outcome, as participating can be active (e.g., the team participating itself) or passive (e.g., other workers who are not actively contributing to the awards team but are now working more sustainably as a result). Furthermore, caution must be placed in using a metric that purely relies on potential outreach, as this might overinflate the impact of the awards. A metric that examines those actively participating, those whose procedure/work has now been changed to be more sustainable, and the potential reach should all be used to provide a clear picture of the impact these awards are having.

Objective Three: Awards continue to have value

The labs do indeed continue to have value, with most labs indicating interest in continuing with the awards. The awards seem to have had a wide impact with some staff even reporting that the awards have influences sustainability at home. Most agreed that there was a push for sustainability and legacy of continuing to be sustainable outside of the awards. However, it was mentioned that the awards and the sustainable campus fund alongside it provided a further push and incentive to be sustainable going forward. Lastly, the awards do clearly continue to have value with many wishing for some recognition for continued sustainability. However, there are some problems with the awards. Firstly, it appears there is not as widespread support and belief in the awards amongst technicians for these awards. This is problematic as technicians form an important core with the running and operation of labs. Greater emphasis needs to be put into place to ensure that technicians feel like the awards have value for them. Work also needs to be put in place to ensure that labs with older facilities are not left out of the awards. Especially as these areas are perhaps where sustainable focus is needed most. Lastly, there was quite a bit of uncertainty about whether the awards incentivised change or recognised existing practice. Work is needed to ensure that participants feel like it is a mix of both, as an initial easy entrance to the awards of recognising existing practice, might allow labs to push further and create change to achieve the awards if they half meet the criteria already.

Objective Eight: Maintain links with green impact appropriate to University business needs, setting up, and running “Engaging Edinburgh Through Green Impact”



A criteria to criteria examination cannot be done between the University of Edinburgh sustainable lab awards, and the Green Impact awards of NUS, due to having to pay and subscribe to NUS to gain this criteria. However, examination of the Green Impact awards available documents and materials on their website and a comparison to the lab awards can be done.

Firstly, the sustainable lab awards in their current format do appear to continue to maintain links with the Green Impact awards with its focus on promoting sustainability throughout the labs and the students who work there. The current lab awards are also a benefit as criteria can be quickly adapted and made more appropriate to the University of Edinburgh specifically.

The general format of the awards appears to be very closely related to the NUS Green Impact awards. In that participating teams complete a workbook that covers multiple areas of sustainability, these being Waste & Recycling, Energy, Travel, Procurement, and Greening teams, action plans and communications. The University of Edinburgh lab awards cover Waste & Recycling, Awareness and training, which appear to match up with the NUS areas. However, Energy is split up over more specific areas, and procurement is spread throughout. One key area missing from the University of Edinburgh lab awards is travel though specifically. While there is a push for travel from the SRS department, it does not appear to have any criteria within the current sustainable lab awards. This appears to be the main departure of the current awards from the NUS Green Impact, and one that might be reintegrated. The levels of awards with increasing criteria though is consistent, although specific numbers of criteria reached might differ, the general concept is similar. Teams are then audited, which is consistent. There is unanimous support for the current auditing process, stating it is highly effective, and a good way of sharing information. Thus, the general process of the awards matches to the NUS Green Impact awards, but appears to be working well with the needs of the University of Edinburgh. Lastly, it seems that whilst support is provided by the NUS Green Impact for participating teams, it is very limited. This is one huge advantage of the University of Edinburgh current lab awards, as the SRS department can provide quicker and more frequent assistance, as well as running labs and workshops. The SRS team and their efficiency in helping participating teams, as well as promoting sustainability has been widely mentioned. Thus, this current lab awards seems to



be much better placed to help teams and promote sustainability than the limited support of the NUS Green Impact awards.

There were some areas of the Green Impact awards that the University of Edinburgh lab awards seem to have diverged from and that can be improved. Firstly, the NUS Green Impact awards appear to have a very strong focus on community building, with their submission system showing other teams participating, and how your team compares with them. It also provides an easy system to share information between labs. This would be a good system to adjust the current awards to, as the sharing of information at audits was seen as a large positive of the system, it makes sense to provide this sharing ability at all times. Furthermore, although not mentioned by the labs directly, offices did mention that the community feeling of the awards was not there. This could be a potentially easy way to not only share information between teams on best sustainable practice, but also create a wider sustainable community. The NUS platform also appears to allow a transfer of evidence from earlier submissions. This was directly pointed out as a feature that was lacking by a technician, who claimed it was responsible for a high drop-out rate for continuing teams. The NUS awards also appear to have a greater focus on students, something that the current awards do not seem to focus on. It might be good to expand the current awards to have a greater focus on students. Not only will this allow students interested in sustainability to participate and be involved with sustainability in their campus, but also allow a greater top-down filtering of sustainability in science to students. Lastly, the NUS does provide a shop to buy green tools from (e.g., water bottles). This might be a potential area for the SRS department to expand in, but this need seems to already be met by other areas within the University.



Recommendations for the Future

This report will now provide general recommendations for the awards going forward. This will first be discussed at a general level and will then be followed by any recommendations are specific to an individual award level (Resident, Offices, and Labs).

General

Generally speaking the awards and the work put in by the SRS department are praised. Despite this there were some areas of improvement or change that can be made going forward. Some of these changes and suggestions were made could be applied to a higher level than their individual award level, or were consistently mentioned. These recommendations for change will now be discussed.

There were some award structure changes that were suggested in order to provide continuing value of the awards. Firstly, there was not widespread support for increasing the levels of the award structure, and most seemed happy with it being three levels. This was despite multiple teams mentioning they felt that they always wanted to strive for a higher level. What did received widespread support and suggestion was recognition of continued service. It was believed that teams who continued to participate and strive towards sustainability should be recognised. This was recommended through a continued service award. This would provide an incentive to continue participating, as well as recognising those teams who have continued to push sustainable practices forward. This is of paramount importance to office and lab awards which have been running for many years now. Another recommendation put forward was to a change for teams re-submitting for a gold award. It was suggested that gold teams could instead of creating a new gold project, could instead provide a mentorship programme for newer teams. This would have the dual benefit of ensuring gold teams do not drop out due to a lack of new ideas, but also to provide support for new teams, where a number of issues have been reported with the difficulty of starting.

Another area of changes was in expansion of the awards. It was seen by a number of individuals across awards that the awards should be expanded to suppliers/external contractors, or at least pressure should be placed on suppliers/external contractors to ensure sustainability is practiced throughout all chains of University. This expansion has already been discussed at an earlier internal SRS department meeting, and there are plans to expand into this area. Another area of expansion of the awards is with the online platform as well.



A few changes were suggested for the awards themselves. A few teams mentioned that they felt the award experience could be quite lonely, furthermore the audits were praised as an effective opportunity to communicate information of best practice. Thus, it is recommended that the online system is expanded to provide a communication system which would allow teams to share best practice amongst each other continuously. The NUS award system could be a useful framework to look at which provides not only a platform for sharing information between teams, but also allows participants to know what other teams are participating, how their team is performing in relation to others. This can be found at

<https://nussustainability.files.wordpress.com/2016/03/workbook-user-guide-2015-16.pdf>).

Another change that was recommended was for teams to be able to carry forward the same evidence from previous submissions if nothing has changed for a criteria. This was brought up specifically within labs as a reason why some teams dropped out. However, this is already an existing feature, and going forward teams should be made more aware of it. Although this was brought up only in the residence awards it could apply to all other awards. This was that greater transparency of the awards and the submissions should be made for students.

Currently students are only able to check what offices, labs, or residences have achieved an award, and its level. But they are not aware of what is being done within their lab, office, or residence unless it is explicitly stated by the team itself. Thus, it is recommended that the submission of awards be made more transparent to students, so that they can check exactly what their office, lab, or residence is doing for sustainability. This has a benefit as it provides feedback to students so they can see what is being done, and feel content about this, or make them aware of gaps in sustainability that they could recommend. This would enable students to be active participants in the awards rather than passive receivers. Another benefit of this is that sites can show students what they are doing, as some aspects of sustainability are hard to make aware (e.g., supply chains, background running). This could be used by teams to explain and encourage changes. Furthermore, it protects sites from negative feedback from students who felt nothing was done, and they didn't deserve the award (this was reported directly from residences). More case studies should be provided for the criteria of the awards. This was mentioned by a number of teams as a gap in the online materials. It would also address the issues and assist new teams with being unsure of what other teams did for a criteria, or when struggling to come up with an idea. Although this exists for offices for gold projects, offices still suggested this. This leads into the last recommendation for change in the awards itself. This is that a greater focus on the communication of the awards, the criteria for



it, and the tools available. Many individuals at lower levels (students and technicians) stated they were not aware of what the awards were, or what they even covered. Even some heads of labs of participating teams showed a lack of awareness of aspects of the awards (e.g., offices not knowing there were gold case studies). This communication needs to be done at all levels from students at the lowest level, to middle level workers (e.g., office workers, technicians), to higher levels (e.g., heads of schools and departments, wardens). Lastly, it is recommended that the awards and their criteria take into account the facilities available to teams. It was reported by multiple sites across the awards that it was felt that teams who had an older building were at a disadvantage and had to struggle to achieve the criteria in the awards, whilst teams with modern buildings could easily achieve the awards. This is important, especially as many buildings in Edinburgh are heritage sites or older in design. A greater focus should be placed on these disadvantaged teams to ensure they are able to access the Sustainability Awards, especially as these sites are probably most at need for sustainable initiatives.

The last general area for recommended changes is monitoring levels. Firstly, it is currently difficult or impossible to measure the impact of programmes/changes/schemes because base levels of sustainability are often not available. While some of these might be possible to back collect (e.g., electricity usage, water usage) others are impossible to back collect (e.g., amount of plastic cups used at an event). In order to properly measure if the awards and the processes taken to achieve them are having a tangible impact on sustainability, base levels are needed to be taken. This would be a major undertaking that would require a large amount of effort, and continued maintenance and reporting. However, it is needed to directly measure sustainable changes. It is important to note that this would be easier for some metrics (e.g., electricity use, chemicals used, plastics used) some changes are hard to gauge. For example, flower beds are clearly related to sustainability, but what outcome would be measured. Another monitoring system that could be put in place is the future impact of students. The point of this monitoring system is to examine whether students are impacted by the awards, and whether this has a legacy of sustainability after students leave the University. One area this could be applied to is students' sustainable behaviour after they leave University accommodation into private accommodation. It is easiest to collect this information while students are still in University, or as perhaps an exit survey, similar to when staff members leave the University.

Lastly, a number of the outcome objectives of the awards was measuring number of staff reached or number of sites participating. There are a number of issues here that could be changed for the future. Firstly is the number of sites participating, whilst this is easiest for residences, where there are concrete numbers of how many residences there are and how many are participating, this is quite difficult for labs and offices. This is because of the question of what is an office or a lab. Unlike residences, which have to participate as a whole site, offices and labs can be on a small level (individual office or a lab) or at a whole school or department level. This is problematic for two reasons. Firstly, teams expanding or combining can be represented as a decrease in numbers despite an increase in reach. For example if three teams are participating within a single department, decide to combine into a whole department team, measuring at just a number of teams level would should a decrease. Secondly, because of these varying levels of participation, what exactly constitutes a lab or an office is hard to measure. This makes it hard to measure the proportion of labs or offices participating. A way around this is measuring the number of staff or students who are effected by the team. This has a benefit that it removes the issues mentioned above, but it also addresses the issue that teams are not equivalent in reach. For example, Holyrood (a participating residence site) participates as a single site that covers 1,180 students compared to Mylnes Court (a non-participating residence site) that covers 156 students. If Holyrood drops out but Mylnes Court joins. No change in number of sites participating would be recorded. But a drop of reach over a thousand students would have occurred. Thus, measuring impact by potential reach is beneficial. However, measuring impact of the awards by this metric is also problematic. Firstly, it is only a measure of potential impact which might overinflate the impact of the awards. Secondly, it relies on teams having easy access to the information of number of staff and/or students they reach, and reporting this. One way around this is measuring only those actively participating in the awards. Whilst this addresses all those issues mentioned above, it has a major drawback. This is that not everyone who is acting sustainability is actively part of the team. Furthermore, it neglects the potential impact of the awards. For example, if a building installs motion detection lights it does not only improve the sustainable behaviour of those actively participating but also those not participating. No clear metric is better over the others, thus it is important that all these measures are considered, or bearing in mind the limitations and benefits of each reporting system.

Residences

Some recommendations for change were specific to residences. One of these was that a greater involvement and awareness of the awards and what is being done for it is needed amongst students. While this was a general issue mentioned above, it was a particularly large problem with residences, where students reported very low satisfaction with the sustainability of their sites. Another change for the students specifically was better recognition for their contribution. It was suggested that this could be done via a similar system to the Edinburgh award, where significant contribution to the awards (often resident assistants) is noted on their academic transcript. This was particularly suggested as resident assistants don't get to keep the award they worked towards, the accommodation site does.

Going forward there were two suggestions for the submission process. Firstly, it was mentioned that the gold criteria was quite vague, the submission process for the gold project was also not seen as optimal. It was felt by one gold site that the written format did not work well for their project, and suggested there should be an option for a presentation. It was also felt the submission process was quite long, one Warden actually recommended a change to make this easier. This was to have continuous collection of evidence through the event reports that have to already be prepared and written for each event.

Lastly, there were two suggestions for the awards more generally. Firstly, the conflicting reports from students on recycling and waste management, indicates that an audit is undertaken of residences of the recycling facilities and the level of information provided to residents. Especially for international students who might not be familiar with recycling, or the Scottish system for recycling. Changes to the auditing process were also suggested. These were that the auditing process be made more practical as it was seen as too theoretical and did not prepare auditors for an audit. It was also suggested that the training be moved up, as it allowed participating teams to talk to other teams and share information.

Offices

There weren't any major or considerably recommendations for the future that only applied to offices. One area that could be worked on is the sustainability campus fund. While this funding was widely praised by labs, offices seemed uncertain for how the process works or if it could be applied to them. One office in particular mentioned that while the sustainable campus fund worked really well for their lab side, their attempt at putting in motion censored



lights through the fan did not work well. It was also felt it sent a mixed message to be sustainable, but only if it can make a profit. Thus, it is recommended that work be put into making the sustainable campus fund more available to offices, and to overcome this perception that it is just about profit.

Labs

There were a number of recommendations that were specific to labs. Firstly, the greatest area of improvement is needed with technicians themselves. It was reported by quite a number of technicians that they felt disenfranchised with the current system. Many felt they were not given the time to participate, and many did not see any benefits to participating. It was also widely evidenced that knowledge of exactly the awards are and constitute were not widely understood by technicians, including those of sites that were participating. There was also little enthusiasm of technicians in participating. This is a vital area that needs to be attended to quickly and effectively. Technicians play an important part in the running, and therefore sustainability of labs, and are vital in labs acting sustainably. It is clear that greater awareness of what the lab awards are, and what is done for it be disseminated to technicians. Improved knowledge of the awards and what they are might increase participation and interest amongst technicians for the awards. The benefits of the awards to technicians needs to be communicated better, or needs to be filtered down better. The heads of labs widely reported benefits of participating, so it is clear there are existing benefits. But these need to be better filtered down to technicians. This could be done in multiple ways including recognising and awarding those technicians who have put in a significant amount of work, passing on the benefits of development and skill learning that heads of labs feel they get from participating. Lastly, it is recommended that focus groups be run with technicians to better understand what they wish to get out of the awards and how to incorporate sustainability into their work. On a similar note many technicians felt that sustainability was not prioritised over direct research output, especially with the very limited time and large workload many technicians reported. Thus, another recommendation for change is that participation in the awards or sustainability generally are of importance. This could be done by tying sustainability to existing work practices like safety that are of high importance. It could also be emphasised or shown how sustainability can have direct research output or make other research output more effective. For example, how new more sustainable equipment can reduce costs, which would allow freeing up of grant funds for say a higher number of trials



and be more effective than outdated equipment. It was suggested by one individual that also making the energy and heating costs more obvious to PIs would push sustainability as an important part in research. Greater work is also needed in highlighting how sustainability and science do go hand in hand, even if some resources (e.g., hazardous chemicals) or processes (24/7 operation of some fume cupboards) are unsustainable other areas are (e.g., efficient use of freezer space, sharing of chemicals).

Another recommendation was that around funding. It is suggested that the sustainable campus funds receive continual promotion, and the benefits to labs in terms of new equipment be pushed on to non-participating labs. It is seen that that sustainable campus fund is a very effective tool to acquire sustainable equipment. This was reported as making heads of departments happy for teams to pursue sustainability. This could also work as an incentive to non-participating teams to at least pursue sustainable purchases with the fund, by reducing the cost for this. It was also recommended to see if labs who showed continuous dedication to sustainability were given priority to receive extra funding that was available. This would show that the University at higher levels is dedicated to sustainability and is willing to invest in those labs that show an interest in promoting sustainability. This could also potentially incentivise other labs to work more sustainability for this potential reward. However, this process needs to consider the existing facilities that are out of control of labs. Otherwise this could end up just rewarding those labs which are in modern buildings which are already sustainable, giving them more funds to maintain sustainability, whilst pushing back further labs who are in older buildings.

The criteria of the awards, for the gold awards needs to be updated. It is problematic if teams are prevented from obtaining this level due to low staff sizes, or if they are too big, which was reported by two teams. It might be the case that the criteria of awards should give allowances for large teams that push sustainability through some of their site, but due to size can't reach everyone to the same level. This could be done by setting percentage goals of the lab to achieve X criteria. Similarly, it could allow for smaller teams to be able to reach gold with less criteria. It is important though that the integrity of the awards and its pursuit for sustainability is not compromised. This could potentially be done by adding separate categories for small, medium, and large labs.



The low participation of some labs and the high turnover rate is an issue that needs to be addressed. While this observation based on a single participating lab, it is potentially a larger issue. A greater push is needed on the continuation of the awards, so that one person leaving does not drop a whole site out of participation. It is recommended that the SRS Department produce resources on how to encourage engagement and assist small teams in staff engagement. It already is a benefit that the awards are given to labs rather than the individual team, as this provides a benefit to a continual team, and gives the department something to support. Another way to do this is to encourage student participation, although students do have a high turnover rate as well, they could provide a large support base to assist with sustainability. It is also recommended to provide an audit of students to see how much they are impacted they are by the awards whilst they are studying, but also as they leave the University. This could give a better understanding of how impactful the awards are outside of the academic staff. Lastly, it is recommended that to address issues of the high turnover rate, is to include information about sustainability and the awards in both student and staff inductions.

Conclusion

In conclusion this report has investigated of the Sustainability Awards for the offices, residences, and labs. It attempted to examine the multiple levels of participation in these rewards, although this was not always possible. This report examined the relevance, effectiveness, efficiency, impact, and legacy of the awards. Overall most people believed that the awards were relevant to their site and role. Sustainability in general was also seen as being relevant. There were some issues around the administration of the awards being not directly relevant to the role and seen as additional work. Generally, the awards were seen as effective, particularly amongst those who ran award teams. The auditing process was universally praised as being very effective. The online materials were also seen as effective, with a few suggestions of what could be added, in particular case studies. The criteria was generally effective but was considered problematic for a few teams due to older buildings, and lack of clarity for gold awards. The awards were generally seen to be effective at recognising the work put in, but there was some disagreement for middle levels (e.g., technicians and resident assistants). Lastly, students disagreed greatly with the awards being effective, with many reporting low effectiveness of their accommodation in the key areas covered by the awards. Overall the workshops and online submission was found to be an

efficient use of resources and system. There were some issues with the online submission, particularly for new users. But those who had participated previously said the new system was a vast improvement over the old one. The awards were seen to have a positive impact overall on the sites participating, as well as those who took part. This wasn't felt by all though with students reporting they did not feel impacted, and technicians reporting that the awards did not have much of an impact on themselves. The legacy of the awards was harder to measure, as there were no baseline measures to assess change over time, nor a mechanism to assess students after they had left. However, the awards were generally seen to provide continuing value and had positive impacts that would remain, at least in part. Although technicians were less certain about this. There also seemed to be an issue with not progressing feeling like a failure, which needs to be addressed to provide continuing value.

The goals of the Sustainability Awards was assessed. Goals 5, 6, and 7 were not assessed as the student, special, and dissertation awards have had a large rework or been dropped since the initial outcome objectives were written. However, the other goals were assessed. In general, it is found that the awards continue to have value meeting goal 3. Goal 1 reaching 15% of staff through labs and offices by 2020, does not look like it will be achieved, and the issues around this have been discussed. Goal 2 reaching 20% of staff through exposure of the awards by 2020 has been easily achieved already, and the issues with this metric have also been discussed. Goal 4 to reach 20 residence sites, has also been already achieved in just the second year of the residence sites participating. Lastly, Goal 8 maintaining links with the Green Impact awards by NUS does appear to be being met.

In conclusion the awards are a valuable tool and resource provided by the SRS department, and is effectively encouraging and promoting sustainability. Although it does have some potential issues, and there are recommendations for change, the awards should be continued.



Reference List

- Brinkhurst, M., Rose, P., Maurice, G., & Ackerman, J. D. (2011). Achieving campus sustainability: Top-Down, bottom-up, or neither? *International Journal of Sustainability in Higher Education*, 12, 338-354
- Cann, M. C. (1999). Bringing state-of-the-art, applied, novel, green chemistry to the classroom by employing the Presidential Green Chemistry Challenge Awards. *Journal of Chemical Education*, 76, 1639-1641.
- Corcoran, P. B. & Wals, A. E. J. (2004). The problematics of sustainability in higher education: An introduction. In: Corcoran, P. B., & Wals, A. E. J. (Eds.) Higher education and the challenge of sustainability: Problematics, promise, and practice. Kluwer Academic Publishers, Dordrecht, The Netherlands, 3-6.
- Davey, E. (2016). Recapturing the learning opportunities of university sustainability indicators. *Journal of Environmental Studies and Sciences*, 7, 540-549.
- Disterheft A., Caeiro S., Azeiteiro U.M., Leal Filho W. (2013) Sustainability Science and Education for Sustainable Development in Universities: A Way for Transition. In: Caeiro S., Filho W., Jabbour C., Azeiteiro U. (Eds) Sustainability Assessment Tools in Higher Education Institutions. Springer, Cham
- Helferty, A & Clarke, A. (2009). Student-Led campus climate change initiatives in Canada. *International Journal of Sustainability in Higher Education*, 10, 287-300.
- ISO. (2010). Guidance on social responsibility. British Standard.
- Kamal, A. S. M. & Asmuss, M. (2013). Benchmarking tools for assessing and tracking sustainability in higher education institutions: Identifying an effective tool for the University of Saskatchewan. *International Journal of Sustainability in Higher Education*, 14, 449-465.
- Lambrechts, W & Ceulemans, K. (2013). Sustainability assessment in higher education. Evaluating the use of the Auditing Instrument for Sustainability in Higher Education (AISHE) in Belgium. In Caeiro, S., Leal Filho, W., Jabbour, C., & Azeiteiro, U. (Eds.) Sustainability assessment tools in higher education institutions. Mapping trends and good practice around the world. Springer, 157-174.



- Lang, T. (2015). Campus sustainability initiatives and performance: Do they correlate? *International Journal of Sustainability in Higher Education*, 16, 474-490
- Lauder, A., Sari, R. F., Suwartha, N., & Tjahhono, G. (2015). Critical review of a global sustainability ranking: GreenMetric. *Journal of Cleaner Production*, 108, 852-863.
- Leal Filho, W., Goncalves, F., Pereira, R., Azeiteiro, U. (Eds) (2012) Contributions to the UN decade of education for sustainable development. ISBN 9783631613474. Peter Lang Scientific Publishers, Frankfurt Lukman & Glavi, 2007;
- Ramos, T., Pires, S.M., 2013. Sustainability assessment: the role of indicators. In: Caeiro, S., Filho, W.L., Jabbour, C., Azeiteiro, U.M. (Eds.), Sustainability assessment tools in higher education institutions: Mapping trends and good practices around the world. Springer, Heidelberg and New York
- Thomashow, M. (2014). The nine elements of a sustainable campus. MIT Press, Cambridge, MA.
- White, S. S. (2014). Campus sustainability plans in the United States: Where, what, and how to evaluate? *International Journal of Sustainability in Higher Education*, 15, 228-241
- Wigmore, A., & Ruiz, M. (2010). Sustainability assessment in higher education institutions. *Ramon Llull Journal of Applied Ethics*, 1(1), 25-42.



Appendix A: Residence Awards Questionnaires

Online Survey

Start of Block: Block 4

Hi,

Thank you for participating in this short survey on the sustainability awards in labs. I am a PhD intern at the Social Responsibility and Sustainability Department and am currently undergoing a review of the Sustainability awards at this university. You will be asked a series of questions of your experience in regards to this, all questions are optional and if you are not comfortable any questions please skip them.

Alistair Soutter

End of Block: Block 4

Start of Block: Demographics

Which student residence are you from?

▼Ascham Court (1) ... West Mains Road (45)

End of Block: Demographics

Start of Block: Knowledge

Are you aware of the Social Responsibility and Sustainability department?

Yes (1)

No (2)



Are you aware of the Sustainability Awards for Student Residences?

- Yes (1)
 - No (2)
-

Did your accommodation participate in the Sustainability Awards for Student Residences this year?

- Yes (1)
 - Maybe (2)
 - No (3)
 - I don't know (4)
-

Do you believe the current awards recognise individual or group student action towards sustainability?

- Yes (1)
- No (2)

End of Block: Knowledge

Start of Block: Effectiveness + Impact

The Sustainability Awards are organised by the Social Responsibility and Sustainability Department, to recognise staff and students who make a difference and contribute towards the University becoming more socially responsible and sustainable. To earn an award, residences must meet a number of criteria across a range of social responsibility and sustainability themes. There are three levels: Bronze, Silver, and Gold, representing the different levels of the award. The Sustainability Awards for Residence covers five themes; Student Engagement, Resource Efficiency, Travel, Energy and Personal Welfare & Wellbeing. The themes promote student outreach and participation, as well



as improving awareness of these issues among the student community. The criteria support residences to positively impact on a range of sustainability issues, as well as supporting the student experience.

The three levels of the award indicate the commitment to each of these levels, additionally those residences qualifying for the Gold award must also complete a large project that aims to tackle one or more of these themes in depth.



For the below questions, please rate how effective your accommodation was



	Very Effective (1)	Somewhat Effective (2)	Somewhat Ineffective (3)	Not effective at all (4)	I don't know (5)
Achieving the goals of the Sustainability Awards (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating and getting you and others engaged with sustainability (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supporting you and others with resource efficiency (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supporting you and others travel more sustainably (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supporting you and others save water and energy (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supporting mental health and wellbeing (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informing me of the Sustainability Awards (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Involving me in
the
Sustainability
awards (8)

Being
Sustainable (9)

What type of impact do you believe your accommodation has on sustainability?

Extremely good (1)

Somewhat good (2)

Neither good nor bad (3)

Somewhat bad (4)

Extremely bad (5)

Are you more likely to choose an accommodation site if it has achieved a Sustainability Award?

Definitely yes (1)

Probably yes (2)

Might or might not (3)

Probably not (4)

Definitely not (5)

End of Block: Effectiveness + Impact



Start of Block: Legacy

How likely are you to act more sustainable in the future?

- Extremely likely (1)
 - Somewhat likely (2)
 - Neither likely nor unlikely (3)
 - Somewhat unlikely (4)
 - Extremely unlikely (5)
-

Do you believe your accommodation has made a significant impact on your sustainability behaviour?

- Definitely yes (1)
 - Probably yes (2)
 - Might or might not (3)
 - Probably not (4)
 - Definitely not (5)
-

Did you have any comments on the sustainability of your accommodation? (Optional)





Do you have any comments on the Sustainability Awards? (Optional)

End of Block: Legacy



Start of Block: Thanks

Thank you very much for your help and time filling out the survey. If you have any questions please feel free to get in touch with me at v1asout2@exseed.ed.ac.uk or at <https://www.ed.ac.uk/about/sustainability/about/contact/team>.

Alistair Soutter

End of Block: Thanks



[RA Interview](#)

Relevance:



1. Do you believe the residence Awards fit into the Universities goal to be a net carbon neutral university by 2040?
2. Do you believe the residence Awards fit into a wider environmental framework, outside of the University?
3. Do you believe the residence Awards and the tasks you need to complete for it fall under your current role?
4. Do you believe the current residence Awards and their tasks are appropriate?
5. Do you believe your warden provided enough advice and assistance with undertaking the awards?

Effectiveness:

1. Please share your thoughts on the effectiveness of the auditing process, e.g. fairly judging the team's efforts and giving constructive criticism, especially in regards to the role of student auditors?
2. How would you rate the effectiveness of the current materials provided?
 - a. Online
 - b. SRS department
 - c. What is missing?
3. What other resources do you think would help you to implement the awards (if they ask what we mean by this e.g., clearer guidance, examples / case studies of other participants, templates, checklist, yearly planner, calendar of key campaigns?)
4. Are the awards effective at recognising staff and students who contribute to creating a more sustainable university?
 - a. Or do you feel the recognition lies on the lab as a whole?

Efficiency:

1. Is the process for submitting evidence of progress easy?
 - a. Can it be improved
 - b. Is it missing anything?



1. Are the programmes and workshops available to participants a good utilisation of resources to help you achieve your sustainability goals?
2. Is the current framework efficient at providing you with the knowledge you need?
 - a. What about SRS staff?

Impact:

1. Do the awards provide an incentive to act sustainably
2. Have there been any projects or changes you have made in order to qualify for an award?
3. Have the awards had any impact on your work as an RA/personal sustainability?

Legacy:

1. Do the current awards structure (Bronze, Silver, Gold) provide continuing value or should it be expanded?
2. Are you likely to continue participating in the awards?
 - a. If not why not?
3. Are you more likely to continue with current and future sustainability programmes outside of the awards?
 - a. If not why not?

Warden Interview

Relevance:

1. How did you hear about the residence Awards?
2. Do you believe the residence Awards fit into the Universities goal to be a net carbon neutral university by 2040?
3. Do you believe the residence Awards fit into a wider environmental framework, outside of the University?
4. Do you believe the residence Awards and the current tasks needed to complete it fit within your current role as it is?
 - a. Not whether in job description, more if it would need to be changed to be relevant to them



5. Do you believe the current residence Awards and their tasks are appropriate?

Effectiveness:

1. Please share your thoughts on the effectiveness of the auditing process, e.g. fairly judging the team's efforts and giving constructive criticism, especially in regards to the role of student auditors?
2. How would you rate the effectiveness of the current materials provided?
 - a. Online
 - b. SRS department
 - c. What is missing?
3. What other resources do you think would help you to implement the awards (if they ask what we mean by this e.g., clearer guidance, examples / case studies of other participants, templates, checklist, yearly planner, calendar of key campaigns?)
4. Are the awards effective at recognising staff and students who contribute to creating a more sustainable university?

Efficiency:

2. Is the process for submitting evidence of progress easy?
 - a. Can it be improved
 - b. Is it missing anything?
3. Is the current framework efficient at providing you with the knowledge you need?
 - a. What about SRS staff?
4. Are the programmes and workshops available to participants a good utilisation of resources to help you achieve your sustainability goals?

Impact:

1. Do the awards provide an incentive to act sustainably
2. Have there been any projects or changes you have made in order to qualify for an award?
3. Have the awards had any impact on your residence?



4. Has participating had any effect on Job satisfaction/development opportunities

Legacy:

1. Do the current awards structure (Bronze, Silver, Gold) provide continuing value?
2. Are you likely to continue participating in the awards?
3. Are you more likely to continue with current and future sustainability programmes outside of the awards?

Warden Survey

Start of Block: Introduction

Hi,

Thank you for participating in this short survey on the sustainability awards in residences. I am a PhD intern at the Social Responsibility and Sustainability Department and am currently undergoing a review of the Sustainability awards at this university. You will be asked a series of questions of your experience in regards to this, all questions are optional and if you are not comfortable any questions please skip them.

Alistair Soutter

End of Block: Introduction

Start of Block: Relevance

Have you heard of the Sustainability Awards for Residences before?

Yes (1)

No (2)



Do you believe sustainability is a relevant concern in your work?

- Yes (1)
 - Maybe (2)
 - No (3)
-

Is sustainability a part of your job description?

- Yes (1)
 - No (2)
-

The Sustainability Awards are organised by the Social Responsibility and Sustainability Department, to recognise staff and students who make a difference and contribute towards the University becoming more socially responsible and sustainable. To earn an award, residences must meet a number of criteria across a range of social responsibility and sustainability themes. There are three levels: Bronze, Silver, and Gold, representing the different levels of the award. The Sustainability Awards for Residence covers five themes; Student Engagement, Resource Efficiency, Travel, Energy and Personal Welfare & Wellbeing. The themes promote student outreach and participation, as well as improving awareness of these issues among the student community. The criteria support residences to positively impact on a range of sustainability issues, as well as supporting the student experience.

The three levels of the award indicate the commitment to each of these levels, additionally those



residences qualifying for the Gold award must also complete a large project that aims to tackle one or more of these themes in depth.

Do you believe the sustainability awards are relevant to the work conducted in your residence?

Yes (1)

No (2)

Display This Question:

If Do you believe the sustainability awards are relevant to the work conducted in your residence? = No

How could they be made more relevant to your residence?

What obstacles are preventing your participation in the awards?



What changes need to be made to make the awards more accessible for you?

Would you encourage your RA team to participate and dedicate time to sustainability projects?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

End of Block: Relevance

Start of Block: Impact

Do you believe the sustainability awards are likely to encourage sustainability?

- Yes (1)
- No (2)

Would you like to expand on your answer above? (Optional)



Do you believe the awards just reward practices that was going to happen anyway?

Yes (1)

Maybe (2)

No (3)

Would you like to expand on your answer above? (Optional)

End of Block: Impact

Start of Block: Block 3

Thank you very much for your help and time filling out the survey. If you have any questions please feel free to get in touch with me at v1asout2@exseed.ed.ac.uk or at <https://www.ed.ac.uk/about/sustainability/about/contact/team>.

Alistair Soutter

End of Block: Block 3



Appendix B: Office Awards Questionnaires

Heads of Office Interview

Relevance:

6. How did you hear about the office Awards?
7. Do you believe the office Awards fit into the Universities goal to be a net carbon neutral university by 2040?
8. Do you believe the office Awards fit into a wider environmental framework?
9. Do you believe the office Awards and the current tasks needed to complete it fit within your current role as it is?
 - a. Not whether in job description, more if it would need to be changed to be relevant to them
10. Do you believe you get enough support to perform these sustainability projects?

Effectiveness:

5. Please share your thoughts on the effectiveness of the auditing process, e.g. fairly judging the team's efforts and giving constructive criticism, especially in regards to the role of student auditors?
6. How would you rate the effectiveness of the current materials provided?
 - a. Online
 - b. SRS department
 - c. What is missing?
7. What other resources do you think would help you to implement the awards (if they ask what we mean by this e.g., clearer guidance, examples / case studies of other participants, templates, checklist, yearly planner, calendar of key campaigns?)
8. Are the awards effective at recognising staff and students who contribute to creating a more sustainable university?

Efficiency:

5. Is the process for submitting evidence of progress easy?
 - a. Can it be improved



- b. Is it missing anything?
6. Is the current framework efficient at providing you with the knowledge you need?
 - a. What about SRS staff?
7. Are the programmes and workshops available to participants a good utilisation of resources to help you achieve your sustainability goals?

Impact:

5. Do the awards provide an incentive to act sustainably
6. Have there been any projects or changes you have made in order to qualify for an award?
7. Have the awards had any impact on your office?
8. Has participating had any effect on Job satisfaction/development opportunities

Legacy:

4. Do the current awards structure (Bronze, Silver, Gold) provide continuing value?
5. Are you likely to continue participating in the awards?
6. Are you more likely to continue with current and future sustainability programmes outside of the awards?

Heads of Office Survey

Start of Block: Information

Hi

Thank you for participating in this short survey on the sustainability awards in offices. I am a PhD intern at the Social Responsibility and Sustainability Department and am currently undergoing a review of the Sustainability awards at this university. You will be asked a series of questions of your experience in regards to this, all questions are optional and if you are not comfortable any questions please skip them

Alistair Soutter

End of Block: Information



Start of Block: Relevance

Are you aware of the Office Sustainability Awards?

Yes

No

Did your Office participated in the Sustainability Awards?

Yes

Maybe

No

I don't know

Do you believe sustainability is relevant to your current role?

Yes

No

Do you believe sustainability is encouraged within your department?

Yes

No

The Sustainability Awards are organised by the Social Responsibility and Sustainability Department, to recognise staff and students who make a difference and contribute towards the University becoming more socially responsible and sustainable. The Office Awards run annually on a calendar year basis. Registration opens in the spring. Throughout the summer and early autumn, participants work to complete the criteria for their chosen Award level (bronze, silver or gold). This typically involves sharing sustainability messages, embedding University guidance and looking for opportunities to improve departmental practices. Teams are required to upload evidence showing how their department has fulfilled each criteria to a website known as the 'online platform'. This



criteria cover communications and engagement, travel, purchasing, resource efficiency, energy, and health and wellbeing.

Would you be interested in your office participating in a sustainability award?

Yes

No

End of Block: Relevance

Start of Block: Impact

Do you believe the current sustainability awards recognise and encourage sustainability?

Yes

No

Are sustainability awards the best way to recognise/encourage sustainability?

Definitely yes

Probably yes

Probably not

Definitely not

Would you like to expand on your above answers? (Optional)



End of Block: Impact

Start of Block: Legacy

Do you believe a sustainability award would encourage colleagues to act more sustainably in the future?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

End of Block: Legacy

Start of Block: Thanks

Thank you very much for your help and time filling out the survey. If you have any questions please feel free to get in touch with me at v1asout2@exseed.ed.ac.uk or at <https://www.ed.ac.uk/about/sustainability/about/contact/team>.

Alistair Soutter

End of Block: Thanks

[Appendix C: Lab Awards Questionnaires](#)

[Heads of Lab Interview](#)

Relevance:

11. How did you hear about the lab Awards?



12. Do you believe the lab Awards fit into the Universities goal to be a net carbon neutral university by 2040?
13. Do you believe the lab Awards fit into a wider environmental framework, outside of the University?
14. Do you believe the lab Awards and the current tasks needed to complete it fit within your current role as it is?
 - a. Not whether in job description, more if it would need to be changed to be relevant to them
15. Do you believe the current lab Awards and their tasks are appropriate?

Effectiveness:

9. Please share your thoughts on the effectiveness of the auditing process, e.g. fairly judging the team's efforts and giving constructive criticism, especially in regards to the role of peer auditors?
10. How would you rate the effectiveness of the current materials provided?
 - a. Online
 - b. SRS department
 - c. What is missing?
11. What other resources do you think would help you to implement the awards (if they ask what we mean by this e.g., clearer guidance, examples / case studies of other participants, templates, checklist, yearly planner, calendar of key campaigns?)
12. Are the awards effective at recognising staff and students who contribute to creating a more sustainable university?

Efficiency:

8. Is the process for submitting evidence of progress easy?
 - a. Can it be improved
 - b. Is it missing anything?
9. Is the current framework efficient at providing you with the knowledge you need?



a. What about SRS staff?

10. Are the programmes and workshops available to participants a good utilisation of resources to help you achieve your sustainability goals?

Impact:

9. Do the awards provide an incentive to act sustainably
10. Have there been any projects or changes you have made in order to qualify for an award?
11. Have the awards had any impact on your lab?
12. Has participating had any effect on Job satisfaction/development opportunities

Legacy:

7. Do the current awards structure (Bronze, Silver, Gold) provide continuing value?
8. Are you likely to continue participating in the awards?
9. Are you more likely to continue with current and future sustainability programmes outside of the awards?

[Heads of Lab Survey](#)

Hi,

Thank you for participating in this short survey on the sustainability awards in labs. I am a PhD intern at the Social Responsibility and Sustainability Department and am currently undergoing a review of the Sustainability awards at this university. You will be asked a series of questions of your experience in regards to this, all questions are optional and if you are not comfortable any questions please skip them.

Alistair Soutter

End of Block: Information

Start of Block: Relevance



Have you heard of the sustainability awards?

Yes (1)

No (2)

Do you believe sustainability is a relevant concern in your work?

Yes (1)

Maybe (2)

No (3)

Is sustainability a part of your job description?

Yes (1)

No (2)

The Sustainability Awards are organised by the Social Responsibility and Sustainability Department, to recognise staff and students who make a difference and contribute towards the University becoming more socially responsible and sustainable.

Using the NUS Green Impact Labs assessment framework (which is also in use in many other UK universities) laboratories based at the University can gain recognition for their efforts in improving efficiency and sustainability in the work place.

Labs can aim for several different levels of assessment (bronze, silver and gold). There are nine broad themes of sustainability which teams must take action on to reduce energy, water and



waste. These are chemicals and gases, scientific equipment, cold storage, fume cupboards and bio-safety cabinets, water, waste and recycling, HVAC, lighting, awareness and training.

Do you believe the sustainability awards are relevant to the work conducted in your lab?

Yes (1)

No (2)

Display This Question:

If Do you believe the sustainability awards are relevant to the work conducted in your lab? = No

How could they be made more relevant to your lab? (Optional)

What obstacles are preventing your participation in the awards? (Optional)

What changes need to be made to make the awards more accessible for you?



Would you encourage those working with you to participate and dedicate time to sustainability projects?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

End of Block: Relevance

Start of Block: Impact

Do you believe the sustainability awards are likely to encourage sustainability?

- Yes (1)
- No (2)

Q12 Would you like to expand on your above answer? (Optional)



Do you believe the awards just reward practices that were going to occur anyway?

Yes (1)

Maybe (2)

No (3)

Would you like to expand on your above answer? (Optional)

End of Block: Impact

Start of Block: Thanks

Thank you very much for your help and time filling out the survey. If you have any questions please feel free to get in touch with me at v1asout2@exseed.ed.ac.uk or at <https://www.ed.ac.uk/about/sustainability/about/contact/team>.

Alistair Soutter

End of Block: Thanks

Technician Survey

Start of Block: Information

Hi,

Thank you for participating in this short survey on the sustainability awards in labs. I am a PhD intern at the Social Responsibility and Sustainability Department and am currently undergoing a review of the Sustainability awards at this university. You will be asked a series of questions of your experience



in regards to this, all questions are optional and if you are not comfortable any questions please skip them.

Alistair Soutter

End of Block: Information

Start of Block: Participate

Which lab do you primarily work in?

Did the lab you work in participate in the lab awards in the last 2 years?

- Yes (1)
- Maybe (2)
- No (3)

End of Block: Participate

Start of Block: Relevance_2



Do you believe the lab Awards fit into the Universities goal to be a net carbon neutral university by 2040?

Yes (1)

Maybe (2)

No (3)

Do you believe the lab awards fit into a wider environmental framework?

Yes (1)

Maybe (2)

No (3)

Do you believe the lab awards and the current tasks needed to complete it fit within your current role?

Definitely yes (1)

Probably yes (2)

Might or might not (3)

Probably not (4)

Definitely not (5)

Do you believe the current lab awards and their tasks are appropriate?

Definitely yes (1)

Probably yes (2)

Might or might not (3)



Probably not (4)

Definitely not (5)

Would you like to expand on your above answer?

Do you believe your manager/head of lab provides enough advice, assistance, or support with undertaking the awards or pursuing sustainable practice?

Definitely yes (1)

Probably yes (2)

Might or might not (3)

Probably not (4)

Definitely not (5)

Would you like to expand on any of your above answers?



End of Block: Relevance_2

Start of Block: Effectiveness_2

Do you believe it's beneficial to have labs audit other labs rather than students? And is this an effective and fair auditing process?

How would rate the effectiveness of the current SRS material in pursuing the awards?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Are there any resources that you think are missing that could help you implement the awards? (e.g., case studies, checklists, templates)



Are the awards effective at recognising the contribution of technicians towards sustainability?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Would you like to expand on any of your above answers?

End of Block: Effectiveness_2

Start of Block: Efficiency_2



Is the process for submitting evidence of progress easy?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

Can the system be improved? Is anything missing?



Are the programmes and workshops available from the SRS department useful in helping you achieve your sustainability goals?

- Extremely useful (1)
- Moderately useful (2)
- Slightly useful (3)
- Neither useful nor useless (4)
- Slightly useless (5)
- Moderately useless (6)
- Extremely useless (7)

Would you like to expand on any of your above answers?

End of Block: Efficiency_2

Start of Block: Impact_2

Do the awards provide an incentive to act sustainably or do they just recognise existing practices?



Have there been any projects or changes made in order to qualify for an award?

Have the awards or through participating in them had any impact on your job satisfaction, and career development?

Have the awards had any impact on your lab/work?

End of Block: Impact_2



Start of Block: Legacy_2



Does the current award structure (bronze, silver, gold) provide continuing value?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

Are you likely to continue participating in the awards?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

Do you believe the awards encourage acting sustainably in the future outside of the awards programme?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

Would you like to expand on any of your above answers?



End of Block: Legacy_2

Start of Block: Relevance

Have you heard of the sustainability awards?

- Yes (1)
- No (2)

The Sustainability Awards are organised by the Social Responsibility and Sustainability Department, to recognise staff and students who make a difference and contribute towards the University becoming more socially responsible and sustainable.

Using the NUS Green Impact Labs assessment framework (which is also in use in many other UK universities) laboratories based at the University can gain recognition for their efforts in improving efficiency and sustainability in the work place.

Labs can aim for several different levels of assessment (bronze, silver and gold). There are nine broad themes of sustainability which teams must take action on to reduce energy, water and



waste. These are chemicals and gases, scientific equipment, cold storage, fume cupboards and bio-safety cabinets, water, waste and recycling, HVAC, lighting, awareness and training.

Would you participate in the lab sustainability awards?

- Definitely yes (1)
- Probably yes (2)
- Maybe (3)
- Probably not (4)
- Definitely not (5)

Do you believe sustainability is a relevant concern in your work?

- Yes (1)
- No (2)

Do you believe the sustainability awards are relevant to the work conducted at your lab?

- Yes (1)
- No (2)

Display This Question:

If Do you believe the sustainability awards are relevant to the work conducted at your lab? = No

How could they be made more relevant to your lab? (Optional)



What obstacles are preventing your participation in the awards? (Optional)

What changes need to be made to make the awards more accessible for you?

End of Block: Relevance

Start of Block: Impact

Do you believe the sustainability awards are likely to encourage sustainability?

Yes (1)

No (2)

Would you like to expand on your above answer? (Optional)



Do you believe the awards just reward practices that were going to occur anyway?

Yes (1)

Maybe (2)

No (3)

Would you like to expand on your above answer? (Optional)

End of Block: Impact

Start of Block: Thanks

Did you have any other comments?



Thank you very much for your help and time filling out the survey. If you have any questions please feel free to get in touch with me at v1asout2@exseed.ed.ac.uk or at <https://www.ed.ac.uk/about/sustainability/about/contact/team>.

Alistair Soutter

End of Block: Thanks
