



Sustainable Labs Steering Group

Monday 19 March 2018, 3pm

1.07, Main Library

AGENDA

- 1 Minute** **A**
To approve the minute of the previous meeting on 15 January 2018 and raise any matters arising

- 2 Gap analysis in lab engagement** **B**
To note and review a short paper from the SRS Project Coordinator – Labs, mapping distribution of key relationships, awards teams, energy coordinators

- 3 Freezer replacement fund review** **C**
To note a paper from the SRS Project Coordinator – Labs, describing the current arrangements and discuss alternative funding models

- 4 SLSG Programme Plan progress update** **D**
To note a paper from the SRS Project Coordinator – Labs, describing progress against the SLSG Programme Plan

- 5 Sustainable Lab Ventilation Policy consultation update** **Verbal**
To receive an update from the SRS Project Coordinator – Labs

- 6 Sustainable Cold Storage consultation update** **Verbal**
To receive an update from the SRS Project Coordinator – Labs

- 7 Lab contributions to Sustainable Campus Fund projects** **Verbal**
To receive an update from the SRS Head of Programmes

- 8 Lab equipment re-use/re-sale procedure consultation update** **Verbal**
To receive an update from the Procurement Category Manager (Laboratories and Medical)

- 9 Polystyrene waste avoidance** **Verbal**
To receive an update from Roslin Procurement Manager

- 10 Sustainability Awards Ceremony** **Verbal**
To receive a reminder of details from the Director of SRS

- 11 Technician Commitment** **Verbal**
To receive an update from the SRS Project Coordinator – Labs

- 12 Any Other Business** **Verbal**
To consider any other matters from Group members



UNIVERSITY OF EDINBURGH

MINUTE OF A MEETING of the Sustainable Laboratories Steering Group held in the Cuillin Room, Charles Stewart House on Monday 15 January 2018.

- Members:** Dave Gorman, (Convener), Director of Social Responsibility and Sustainability
Andrew Arnott, SRS Projects Coordinator
Graham Bell, Depute Director - Estate Development
Michelle Brown, Head of SRS Programmes
Martin Crawford, Controls Manager
Joanne Dunne, Early Stage Researcher
Grant Ferguson, Head of Estates Operations
Kate Fitzpatrick, Waste & Recycling Manager
Simon Santamaria Garcia, Student Representative, School of Engineering
Val Gordon Technical Officer, Institute for Education, Teaching & Leadership
David Gray, Head of the School of Biological Sciences
Sharon Hannah, Bioquarter Campus Operations Manager
Yuner Huang, Early Stage Researcher
Angela Ingram, Service Manager, IGMM
David Jack, Energy Manager
Andy Kordiak, Equipment Procurement Manager, CMVM
Julia Laidlaw, Estate Development Manager, Bioquarter
Sandra Lawrie, Technical Services & Estates Manager, School of Biological Sciences
Chris Litwiniuk/Caro Overy, SRS Engagement Manager
Guy Lloyd-Jones, Forbes Chair of Organic Chemistry
Robert MacGregor, AECOM & Estates
Stewart McKay, Technical Services Manager, IGMM
Brian McTier, Easter Bush Campus Facilities and Services Manager
Lee Murphy, Genetics Core Manager
Janet Philp, Joint Unions Liaison Committee
Candice Schmid, Occupational Hygiene and Projects Manager
Matthew Sharp, Operations Manager CBS
- In attendance:** Karen Darling, Deputy Director, Health & Safety, for Candice Schmid
- Apologies:** Martin Crawford; Grant Ferguson; Kate Fitzpatrick, Simon Santamaria Garcia; David Gray; Andy Kordiak; Julia Laidlaw; Sandra Lawrie; Guy Lloyd-Jones; Brian McTier; Janet Philp; Candice Schmid; Matthew Sharp

1 Minute

The Convener welcomed attendees to the ninth meeting of the Group. SLSG welcomed new members Joanne Dunne and Yuner Huang, both early stage researchers.

The minute of the meeting held on 3 October 2017 was approved as a correct record.

Findings from Energy Audits

The SRS Projects Coordinator – Labs had followed up with the Head of Small Projects & Minor Works and confirmed there were no clashes with the scheduled programme of works.

A

2 Sustainable Labs Ventilation

B

With input from SLSG members, the SRS Projects Coordinator – Labs developed this initial draft which would be worked up into a final policy, balancing the safety of lab users and energy efficiency. The draft would be split into separate documents covering fume cupboards, animal housing, and standard rooms.

There were opportunities to run fume cupboards at lower face velocities, and measures needed to be taken to ensure annual checks flagged units that were running too high as well as too low. Guidelines should be 'plus or minus 10%', and not over a set amount. There were also opportunities to reduce the number of air changes per hour. 12ACH should be seen as an upper limit, unless there were site-specific reasons to exceed this. Responsibility for adjusting air flow would lie with the Controls team.

Action – AA to circulate references for labs that have adopted 6ACH or 8ACH.

Action – RM to send SM current Estates guidelines on air changes.

Additional work was needed to develop this draft into a formal policy that could be taken forward to Estates Committee, University Health and Safety Committee and on to Policy and Resources Committee, (and, if necessary, Court). The purpose of the paper should be made clear, in layperson's terms, outlining the range of benefits the policy would deliver. Estimated financial savings would need to be quantified and assurances made that the policy was in line with Health and Safety requirements. The policy should be separated from the wider context which could be included as an annex. Further thought should be given to implementation processes and additional consultation carried out with the Colleges, School Safety Advisors and Estates (particularly the Head of Estates Operations).

Action – AA to prepare a note for DG to send to College Registrars for advice on who to consult.

Action – GB to send policy template to AA.

Action – KD to follow up offline with comments on the draft from Health and Safety.

3 Sustainable Cold Storage

C

The paper outlined a three phase approach for freezer facilities: ensuring as much natural ventilation as possible; increasing natural ventilation speed with fans; then shutting louvres and running air conditioning, to reduce stress on freezers. The paper should make it clear that the guidance outlined was relevant to new builds, but not appropriate for all existing spaces. The annex provided an update to existing best practice documentation. These recommendations were also included in sustainable lab inductions, summarised in posters and in the labs section of the Be Sustainable online training.

Action – AA to add a planned schedule to review the policy (e.g. every two years).

This cold storage work should be integrated into the ongoing process in Estates to review T46 and other design guidelines. Members welcomed the paper, particularly the attachment, which could be worked up as part of planned development of Be Sustainable.

In terms of -70 promotion, a cautious approach was advised. No data had yet been released from the Roslin cold storage study. Once this was available, the best approach could be to ask colleagues to review the findings and decide for

D

themselves. This would not make for a catchy message, but would be more accurate. Another options would be to identify groups where -70 was more viable, though for data security reasons the results of the Roslin study could not be used. A blanket approach to those storing samples for a shorter period of time would be preferable, where a slightly sped up rate of degradation would have less of an impact. SLSG agreed to proceed with option 1.

4 Lab Equipment Re-use/Re-sale Procedure

The Category Manager (Labs and Medical Procurement) had updated the flowchart based on feedback received from College Registrars, Waste & Recycling, and other key stakeholders.

Action – AK to circulate the updated draft to the Group.

5 Estates Development Sustainability Guidelines

The Director of SRS updated the Group on the review of design guidelines for sustainability currently ongoing with the Estates Capital Projects team. Having investigated approaches taken by other institutions moving on from BREEAM, a draft bringing together best practice had been developed, with the final version due to go to Estates Committee in the spring. The next step would be to test the approach, ideally on an existing BREEAM-rated building. A potential candidate had been identified at QUB. A version of the carbon calculator had now been developed. The Head of Capital Projects would nominate colleagues in Estates to test it.

6 Edinburgh Sustainability Awards

The Engagement Manager thanked all members who had participated in or supported the Awards. Reports had now been circulated to this year's teams. Winners would be announced publically before the awards ceremony on 29 March. The office and lab awards 2018 would launch in February. The special awards were also running this year, with a deadline of 1 March. These gave the opportunity to recognise more project-based work in various categories, including labs. This summer SRS would review the whole scheme (comprising office, lab, special, student, student residence and dissertation awards), to ensure they were all performing as intended – to recognise meaningful action on campus. Outcomes from the review would be implemented in 2019. 30% of labs currently participated in the scheme. SRS were looking at ways to increase this. A meeting with Biological Sciences building management and technical support staff should generate more teams.

Action – All members to feed back their positive and negative experiences of the scheme via the questionnaire circulated by CO.

Action – AA to circulate to the Group a list of labs teams currently participating in the scheme.

Action – CL to prepare a note for DG to send to Schools to promote the awards scheme (as has been done with ISG on energy engagement).

7 Improving Support for Technical Staff Careers

UoE had signed the Technician Commitment, with work now ongoing to meet the criteria in a number of categories. Progress would be evaluated at the end of the year, and every two years after that. There was already significant activity in this area which would need to be pulled together to ensure UoE secured recognition for everything it was doing.

On recognition, staff were being encouraged to take on technical registration. On sustainability, work was ongoing to maintain technical skills within the University, as well as bring in new blood. There was a template to work to, and a Technical Staff Support Group had been set up. Ten hours per week of Val Gordon's time was set aside for the project. A website would soon be launched – details would be circulated to the Group once available. Roslin would have ownership of the webpages, which were currently on WordPress, but could easily be transferred onto the main UoE site.

Action – DG to send out a communication featuring highlights from the work and a quotation from the Vice-Principal People and Culture.

8 Progress against the Sustainable Labs Programme Plan

E

The SRS Projects Coordinator – Labs updated the Group on progress against the Sustainable Labs Programme Plan 2017-20, approved in October. Overall, progress was good, with those areas not at green RAG status earmarked for future action.

A key activity was promoting use of the Sustainable Campus Fund, to help ensure full allocation of funds. To be considered, proposals for energy, water, waste or other resource savings should offer a payback of 8 years or less. Both large and small-scale projects would be considered.

Action – All members to put forward any ideas for projects meeting SCF criteria.

As a substantial part of UoE's carbon footprint came from conference travel, another key action would be supporting the organisation of a prestigious conference over VC, though more groundwork would be needed to identify a suitable existing conference, and establish where funding might come from.

Work developing kWh/m² targets for various space use categories would tie in to outputs from review of Estates development guidelines.

Action – AA to follow up with the Controls Team on extending the BMS/HVAC control sense checks programme to further lab spaces.

Action – DJ to share with AA the current schedule, to avoid duplication.

No action had yet been taken on working with Schools and Colleges to ensure their Plans included how they intended to play their part in achieving 'Zero by 2040'. Members were asked to encourage their School/College management to meet SRS representatives to begin these conversations.

Action – AA to remove this activity from the plan, as it would be carried out as part of routine SRS engagement.

Action – All members wanting to arrange a 'Zero by 2040' briefing to contact DG.

The intention was to expand recruitment of paid student interns to do inventory work over the summer, removing old samples, freeing up space, defrosting and de-icing.

On hazardous chemical substitution, the Labs Coordinator could point members to websites that suggested less hazardous alternatives for specific activities, though labs should already be using the safest chemicals, as part of existing risk assessments.

It was proposed that future reporting be in the form of a Gantt chart, showing inactive areas.

Action – AA to adopt that format for future progress reports.

9 Report from Energy Engagement Impact Monitoring at IGMM

SRS, Estates and colleagues at IGMM had set up energy monitors across two floors, initially measuring baseline lab and office energy consumption for two months, before engaging on a basic level (using posters and stickers promoting energy efficient behaviours), then delivering face-to-face presentations and measuring the impact. Data from HR showing the varying population of the labs over this summer period was used to contextualise findings. Overall, the study found some quite positive reductions. The impact of the posters was fairly small at 2-6% reduction, but involved minimal effort, whereas face-to-face engagement resulted in an 8-21% drop. Measurements taken in late November to early December showed that these reductions had, more or less, been maintained. The overall change in energy consumption per person per day from June to December varied between 9 and 26% over three circuits. The study did not include plant, just equipment and lighting. These findings were quite surprising as IGMM was already engaged, and highlighted the value of empowering lab users to turn equipment off. This could be rolled out to other locations.

Action – AA to look at the feasibility of carrying out a similar project in Swann, as part of the meeting with Biological Sciences.

10 Any Other Business

The Group discussed the ongoing issue with polystyrene packaging, and the need for procurement to put pressure on all suppliers to take back packaging, picking up old polystyrene and gel packs when making new deliveries. Colleagues at Roslin had made some headway in this area and could update the Group.

SLSG thanked outgoing member Graham Bell for his advice and support for the sustainable laboratories programme.



Sustainable Labs Steering Group

19th March 2018

Sustainable Labs engagement – gap analysis and mapping

Description of paper

This document is intended to give an update the extent of engagement with the sustainable labs programme across the different lab locations of the University of Edinburgh. It is intended to highlight areas where engagement with the sustainable labs programme is currently lacking.

Action requested

SLSG is asked to note the areas of success and the gaps described in this paper and provide any advice or guidance for further improvement.

SLSG is also asked to review the list of buildings classified as ‘lab buildings’, as well as the lists of energy coordinator and lab awards data, and feedback any suggested amendments.

Background and context

The Sustainable Labs programme depends upon engagement, cooperation and involvement from as many lab areas as possible in order to achieve its goals and effect positive social responsibility and sustainability change. Thus identifying engagement gaps is an important step in taking action to address these gaps.

SLSG outcome objectives (bold relate to engagement):

- 1. 10% reduction in energy consumption.**
- 2. Lab equipment reuse and sharing increased**
- 3. Reduced consumption of materials, especially hazardous materials.**
- 4. Enable culture of sustainable working through provision of support and training for lab technicians.**
5. Adoption and use of sustainable building design guidelines (incorporating labs) and Soft Landings or similar approach.
- 6. 100% of labs covered by Edinburgh Sustainability Awards teams**
- 7. By 2020 every building with labs will have an energy coordinator who is lab-based.**

Report

Results:

43 buildings were identified as ‘lab buildings’, after removing duplicates caused by the way buildings are subdivided and listed. Of them, 26 had an energy coordinator logged on the SRS database, equating to 60% coverage. However, it should be noted that it is not known whether the energy coordinators in these buildings are based in/engage with labs or not. Further data gathering from the Energy

Coordinator network is required – on hold until the position of SRS Project Coordinator (Energy) is filled in April/May 2018.

14 buildings were covered by teams taking part in the Lab Sustainability Awards, equating to 33% coverage.

Gaps:

The below dataset shows all the lab buildings, and whether they are covered by an energy coordinator, lab award team, both, or neither. Those covered by both have been left un-shaded. Those covered by either an energy coordinator or a lab awards team but not both are highlighted amber. Those covered by neither an energy coordinator nor a lab awards team are highlighted red.

Buildings (715 active)	School	Energy coordinator?	Lab Awards Team?
TOTAL		26	14
Alexander Graham Bell Building, Kings Buildings, Thomas Bayes Road, EH9 3FG	Engineering	0	0
Alrick Building, Kings Buildings, Max Born Crescent, EH9 3BF	Engineering	0	0
Ann Walker Building, Thomas Bayes Road, Edinburgh, EH9 3FG	CBS	1	1
Ashworth Ext New Wing, Kings Buildings, West Mains Road, EH9 3JT	SBS	1	0
Biochar Laboratory, Kings Buildings, Max Born Crescent, EH9 3BF	Geosciences	0	0
Biospace Building, Kings Buildings, Born Crescent, EH9 3BF	?	0	0
Bumstead Building, Bush Farm Road, Bilston, Roslin, Midlothian, EH29 9RG	CBS/Vet	1	1
Bush Estate General, Easter Bush, Roslin, Edinburgh, EH25 9RG	Vet	1	1
Central Breeding Hub, Easter Bush	CBS/Vet	1	1
Chancellors Building, Little France, 49 Little France Crescent, Edinburgh, EH16 4SB	Medic	1	0
Child Life and Health Rhsk, Royal Infirmary, Dalkeith Road, EH16 4SA	Medic	0	0
Crew Laboratory, Kings Buildings, Edinburgh, EH9 3JN	Geosciences	1	0
Dan Rutherford Building, Kings Buildings, Max Born Crescent, EH9 3BF	SBS	1	0
Darwin Building + Outhouses, Kings Buildings, Max Born Crescent, EH9 3BF	SBS	1	0
Drummond St Annexe, 1 Drummond St, Edinburgh, EH8 9XP	Geosciences	1	0
Eng Sanderson Building, Kings Buildings, Robert Stevenson Road, EH9 3FB	Engineering	0	0

Eng Structures Lab, Kings Buildings, Colin Maclaurin Road, EH9 3DW	Engineering	0	0
Erskine Williamson Building, Kings Buildings, Peter Guthrie Tait Road, EH9 3FD	Engineering	0	0
Faraday Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW	Engineering	1	0
Fleeming Jenkin Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW	Engineering	1	0
Geology/Geophysics, Kings Buildings, James Hutton Road, EH9 3FE	Geosciences	1	0
Hudson Beare Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW	Engineering	0	0
Inst Of Anatomical Biomedical and Surgical Scie, Biomedic Res Prk Plot 2 And 3, Little France Drive, EH16 4UU	Medic	0	0
Inst Of Pop Health Science, Little France Drive, Edinburgh, EH16 4UU	Medic	0	0
Institute For Regeneration & Repair, Biomedic Res Prk Plot 4, Edinburgh, EH16 4UU	Medic	1	0
JCMB, Kings Buildings, Peter Guthrie Tait Road, EH9 3FD	Physics, Maths, SBS, Engineering	1	1
Joseph Black Building, Kings Buildings, David Brewster Road, EH9 3FJ	Chemistry	1	1
Large Animal Hospital, Easter Bush, Roslin, Edinburgh, EH25 9RG	Vet	1	1
March Building, Kings Buildings, James Hutton Road, EH9 3FE	CBS	1	1
Mary Bruck Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW	Engineering	0	0
Medical School, Teviot, Teviot Pl, Edinburgh, EH8 9AG	Medic	1	0
New Geosciences Building, Kings Buildings, Edinburgh, EH9 3JF	Geosciences	1	0
Number Nine, Little France Drive, EH16 4UU	Medic	0	0
Peter Wilson Building, Kings Buildings, Nicholas Kemmer Road, EH9 3FH	SBS, Engineering, SRUC	0	1
Queens Med Res Inst, Little France, 47 Little France Crescent, Edinburgh, EH16 4TJ	Medic	1	1
Roger Land Building, Kings Buildings, Alexander Crum Brown Road, EH9 3FF	SBS	0	1
Scottish Micro Elec Ctre, Kings Buildings, Alexander Crum Brown Road, EH9 3FF	Engineering	0	0
Scrm, 5 Little France Drive, Edinburgh, EH16 4UU	Medic	1	0
Swann Building, Kings Buildings, Max Born Crescent, EH9 3BF	SBS	1	0
WGH Biological Res Fac, Crewe Rd S., Edinburgh, EH4 2XU	Medic	1	1

WGH Igmm East Building (Systems Med), Crewe Road South, Edinburgh, EH4 2XU	Medic	1	1
Waddington Building 1, Kings Buildings, Max Born Crescent, EH9 3BF	SBS	1	0
William Rankine Building, Kings Buildings, Thomas Bayes Road, EH9 3FG	Engineering	0	1

Resource implications

No additional resources are expected to be required to implement improvements to lab engagement – it should be possible to do so with the existing resources available.

Risk Management

Risk of not achieving SLSG, SRS, and University of Edinburgh sustainability targets if more comprehensive engagement is not achieved.

Equality & Diversity

No foreseen impacts.

Next steps/implications

- Further data gathering from the Energy Coordinator network to identify extent of energy coordinators in labs.
- Identify contacts and arrange meetings with areas highlighted in red
- Set up specific engagement activities for labs in those areas
- Discuss with SLSG members if they would be willing to help promote and encourage participation
- Work with areas where no lab awards team has yet participated to encourage participation
- Contribute to awards review (offices and labs) areas highlighted in red, and to increase lab award coverage

SLSG feedback will be actioned by the SRS Projects Coordinator (Labs).

Consultation

Dave Gorman – Director - Department for Social Responsibility and Sustainability
Michelle Brown – Head of Programmes – Department for Social Responsibility and Sustainability
Chris Litwiniuk – Engagement Manager – Department for Social Responsibility and Sustainability

Further information

Author and Presenter

Andrew Arnott
SRS
March 2018

Freedom of Information

This is an open paper.

Appendix 1:

Methodology:

A list of buildings was obtained from Estates. This list was then analysed to identify those buildings which would be described as 'lab buildings'. 'Lab buildings' were defined as buildings containing wet labs, clinical areas, or animal facilities.

The list of lab buildings identified was then analysed against SRS databases of energy coordinator locations, sustainability awards teams, and other sites with known active contacts (but who have not volunteered to become an energy coordinator or take part in the awards).

Some key contacts are known to cover multiple buildings, e.g. Brian McTeir at Easter Bush, David Hills at BTO, and Stewart McKay at IGMM. As this analysis is intended to determine physical areas without sustainable labs engagement this means that one of the above noted key contacts will result in multiple buildings being classified as 'engaged'.

Appendix 2:

Main List of Lab Buildings (43):

Alexander Graham Bell Building, Kings Buildings, Thomas Bayes Road, EH9 3FG
Alrick Building, Kings Buildings, Max Born Crescent, EH9 3BF
Ann Walker Building, Thomas Bayes Road, Edinburgh, EH9 3FG
Ashworth Ext New Wing, Kings Buildings, West Mains Road, EH9 3JT
Biochar Laboratory, Kings Buildings, Max Born Crescent, EH9 3BF
Biospace Building, Kings Buildings, Born Crescent, EH9 3BF
Bumstead Building, Bush Farm Road, Bilston, Roslin, Midlothian, EH29 9RG
Bush Estate General, Easter Bush, Roslin, Edinburgh, EH25 9RG
Central Breeding Hub, Easter Bush
Chancellors Building, Little France, 49 Little France Crescent, Edinburgh, EH16 4SB
Child Life and Health RhsK, Royal Infirmary, Dalkeith Road, EH16 4SA
Crew Laboratory, Kings Buildings, Edinburgh, EH9 3JN
Dan Rutherford Building, Kings Buildings, Max Born Crescent, EH9 3BF
Darwin Building + Outhouses, Kings Buildings, Max Born Crescent, EH9 3BF
Drummond St Annexe, 1 Drummond St, Edinburgh, EH8 9XP
Eng Sanderson Building, Kings Buildings, Robert Stevenson Road, EH9 3FB
Eng Structures Lab, Kings Buildings, Colin Maclaurin Road, EH9 3DW
Erskine Williamson Building, Kings Buildings, Peter Guthrie Tait Road, EH9 3FD
Faraday Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW
Fleeming Jenkin Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW
Geology/Geophysics, Kings Buildings, James Hutton Road, EH9 3FE
Hudson Beare Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW
Inst Of Anatomical Biomedical and Surgical Scie, Biomedic Res Prk Plot 2 And 3, Little France Drive, EH16 4UU
Inst Of Pop Health Science, Little France Drive, Edinburgh, EH16 4UU

Institute For Regeneration & Repair, Biomedic Res Prk Plot 4, Edinburgh, EH16 4UU
 JCMB, Kings Buildings, Peter Guthrie Tait Road, EH9 3FD
 Joseph Black Building, Kings Buildings, David Brewster Road, EH9 3FJ
 Large Animal Hospital, Easter Bush, Roslin, Edinburgh, EH25 9RG
 March Building, Kings Buildings, James Hutton Road, EH9 3FE
 Mary Bruck Building, Kings Buildings, Colin Maclaurin Road, EH9 3DW
 Medical School, Teviot, Teviot Pl, Edinburgh, EH8 9AG
 New Geosciences Building, Kings Buildings, Edinburgh, EH9 3JF
 Number Nine, Little France Drive, EH16 4UU
 Peter Wilson Building, Kings Buildings, Nicholas Kemmer Road, EH9 3FH
 Queens Med Res Inst, Little France, 47 Little France Crescent, Edinburgh, EH16 4TJ
 Roger Land Building, Kings Buildings, Alexander Crum Brown Road, EH9 3FF
 Scottish Micro Elec Ctre, Kings Buildings, Alexander Crum Brown Road, EH9 3FF
 Scrm, 5 Little France Drive, Edinburgh, EH16 4UU
 Swann Building, Kings Buildings, Max Born Crescent, EH9 3BF
 WGH Biological Res Fac, Crewe Rd S., Edinburgh, EH4 2XU
 WGH Igmm East Building (Systems Med), Crewe Road South, Edinburgh, EH4 2XU
 Waddington Building 1, Kings Buildings, Max Born Crescent, EH9 3BF
 William Rankine Building, Kings Buildings, Thomas Bayes Road, EH9 3FG

Appendix 3:

List of duplicate entries for lab buildings (42):

Ashworth Extension, Kings Buildings, Edinburgh, EH9 3JT
 Ashworth Four, Kings Buildings, West Mains Road, EH9 3JT
 Ashworth Labs, Kings Buildings, Charlotte Auerbach Road, EH9 3FL
 Biochar 2, Kings Buildings, West Mains Road, EH9 3JN
 Block F, Easter Bush, Roslin, Edinburgh, EH25 9RG
 Block G, Easter Bush, Roslin, Edinburgh, EH25 9RG
 Block H, Easter Bush, Roslin, Edinburgh, EH25 9RG
 Crew Building Teach.Lab, Kings Buildings, Alexander Crum Brown Road, EH9 3FF
 Darwin Contain Greenhouse, Kings Buildings, West Mains Road, EH9 3JR
 Darwin L T C, Kings Buildings, Max Born Crescent, EH9 3BF
 EBVC MRI Scanner, Easter Bush, Roslin, Edinburgh, EH25 9RG
 Easter Bush Centre Building, Bush Farm Road, Bilston, Roslin, Midlothian, EH25 9RG
 Easter Bush Vet Ctre, Easter Bush, Roslin, Edinburgh, EH25 9RG
 Flowave Tt Building, Kings Buildings, Max Born Crescent, EH9 3BF
 Geography (Old Infirmary), 1 Drummond Street, Edinburgh, EH8 9XP
 Large Animal Res&Imag Ctre, Bush Farm Road, Bilston, Roslin, Midlothian, EH25 9RG
 New Ashworth Teaching Hub, Kings Buildings, West Mains Road, EH9 3JT
 New Freezer Farm, Easter Bush, Roslin, TBC
 Roslin Institute, Bush Farm Road, Bilston, Roslin, Midlothian, EH25 9RG
 Roslin-Main Building, Roslin Institute, Midlothian, EH25 9PS

Sir A Robertson Ctvm, Easter Bush, Roslin, Edinburgh, EH25 9RG
Small Animal Riddell Swann, Easter Bush, Roslin, Edinburgh, EH25 9RG
Vet School, Easter Bush, Roslin, Edinburgh, EH25 9RG
WGH 1b Transgenic Building (Evans), Crewe Rd South, Edinburgh, EH4 2XU
WGH 1c Brf, Crewe Rd S., Edinburgh, EH4 2XU
WGH 3n Bramwell Dott, Crewe Rd S., Edinburgh, EH4 2XU
WGH 3y D-Block, Crewe Rd S., Edinburgh, EH4 2XU
WGH 4m Clock Tower, Crewe Rd S., Edinburgh, EH4 2XU
WGH 4q E&B Portacabin, Crewe Rd S., Edinburgh, EH4 2XU
WGH 4s Library, Crewe Rd S., Edinburgh, EH4 2XU
WGH 5f Clin Oncology, Crewe Rd S., Edinburgh, EH4 2XU
WGH 5q Med Phys, Crewe Rd S., Edinburgh, EH4 2XU
WGH 6d Jhb Lab, Crewe Rd S., Edinburgh, EH4 2XU
WGH 6f MRI Unit, Crewe Rd S., Edinburgh, EH4 2XU
WGH 6q Medicine, Crewe Rd S., Edinburgh, EH4 2XU
WGH 6q Wtrcf (Clinical), Crewe Road S, Edinburgh, EH4 2XU
WGH 6v CJD Unit, Crewe Rd S., Edinburgh, EH4 2XU
WGH Igmm North Building (Mmc), Crewe Rd S., Edinburgh, EH4 2XU
WGH Igmm South Building (Can Res), Crewe Rd S., Edinburgh, EH4 2XU
WGH Igmm West & Centre Buildings (Hgu), Crewe Rd S., Edinburgh, EH4 2XU
WGH Opd/Med Educ Ctre, Crewe Rd South, Edinburgh, EH4 2XU
Waddington Building 2, Kings Buildings, West Mains Road, EH93JD



Sustainable Labs Steering Group

19th March 2018

Freezer Replacement Fund Review Paper

Description of paper

This document is intended to give background information relating to the Freezer Replacement Fund (a ring-fenced section of the Sustainable Campus Fund).

Action requested

SLSG is asked to review current format of the freezer fund, and its relatively low take-up, and consider whether other formats may be more suitable, more appropriate or more attractive and should be trialled as an alternative to the existing format.

Background and context

The Sustainable Campus Fund established the Freezer Replacement Fund in September 2016 as a mechanism to streamline a perceived large demand for ULT freezer replacement applications to the SCF. Subsequent take-up of the fund has been very low, with only a couple of applications in the past 18 months.

The details of the fund can be found in the two appendices to this paper. Appendix 1 shows the original paper requesting the establishment of the Freezer Replacement Fund from the SCF. Appendix 2 shows the current application form, describing the criteria and process.

Discussion

The SLSG are asked to discuss whether alternative funding models are required in order to generate further interest in the fund. If alternative models are suggested, the SLSG are asked to suggest what the format the alternative model should adopt.

Resource implications

If the funding for replacing freezers is made more generous, and there is a substantial increase in uptake of that funding, there could be a draw-down on the Sustainable Campus Fund. However, applications would still need to meet the needs of the Sustainable Campus Fund, and so it could be considered a positive development, producing more applications for the fund, and more opportunities to 'spend-to-save'.

Risk Management

Risk of not achieving SLSG, SRS, and University of Edinburgh sustainability targets if more substantial replacement of ULT freezers is not achieved.

Equality & Diversity

No foreseen impacts.

Next steps/implications

SLSG feedback will be actioned by the SRS Projects Coordinator (Labs).

Consultation

Michelle Brown – Head of Programmes – Department for Social Responsibility and Sustainability

Chris Litwiniuk – Engagement Manager – Department for Social Responsibility and Sustainability

Further informationAuthor and Presenter

Andrew Arnott

SRS

March 2018

Freedom of Information

This is an open paper.

Appendix 1:

UTILITIES WORKING GROUP

Thursday 15th September 2016

Potential Freezer Replacement Funding Models

Description of paper

This paper describes funding models used for freezer replacement schemes as successfully implemented at University of Bristol, Harvard, and King's College London, as well as the Salix model, recommending we adopt the model tried and tested at University of Bristol within the Sustainable Campus Fund initiative.

Action requested

Utilities Working Group are asked to consider the proposal outlined to ring fence £37,500 of the Sustainable Campus Fund in Year 1 of the initiative to address known demand for freezer replacement, and to discuss the potential for widening freezer replacement in the ways further proposed beyond this.

Recommendation

It is recommended that the Utilities Working Group consider the options for funding freezer replacements, and decide an approach for future applicants to the Sustainable Campus Fund.

Background and context

Since the launch of the Sustainable Campus Fund, applications have been made to fund replacements of ULT freezers, where savings can be made through purchasing newer and more energy efficient models. However, the Utilities Working Group cannot endorse the use of Sustainable Campus Fund for full cost of new equipment due to concerns about fairness and distribution of funds, hence the Group requested further information and proposal for ways to support such equipment purchases.

Other Institutions' Approaches

Below are the approaches taken by the University of Bristol and King's College London, as two comparable institutions in the UK, as well as Harvard's approach, and the Salix fund standard, applicable nationally.

University of Bristol

Retiring an old ULT freezer: Applicants are asked to monitor the energy consumption of old ULT for 1-4 days and send the energy data back to the Lab Sustainability Coordinator. This ensures that funds are used to replace actually functioning freezers, rather than paying a lab to scrap one which is non-functional and not in use, and thus not incurring any energy consumption. Calculations of energy savings are then undertaken. The fund will supply up to £1,500 or up to a 7-year payback period on the amount of funding applied for i.e. if the energy saving would be £100

per year the fund will provide £700 only – the remaining balance of costs must be made up by the applicant. Typical savings from replacing an old ULT are around £200 - £300 annually, so most applications should be eligible for close to the full £1,500 value. The applicant must prove the freezer was operational (and energy consuming) beforehand, and has been retired correctly via provision of appropriate waste documentation.

Purchasing an additional ULT freezer: The fund will pay the difference between a 'standard' and an 'eco' model and have found that this equates to a payback to the fund of around 4 years.

Retiring an old -20 freezer: As per retiring an old ULT freezer, but the fund will only supply up to £100.

There is a caveat that each case will be assessed by the Labs Sustainability Coordinator on its merits.

King's College London

Purchasing an additional ULT: The fund will pay the difference between a 'standard' and an 'eco' model. They are also working on their internal procurement processes to limit the options available to purchasers to avoid any new inefficient units being purchased.

Harvard¹

Purchasing an additional ULT freezer: the Faculty of Arts and Sciences "Eversource" fund will pay the difference between a 'standard' model and a model which meets the criteria of the FAS (not disclosed but on average their 'energy efficient ULTs' result in a saving of 5.5kWh/day, which at 10p/kWh in Edinburgh would equate to £200/year). Their website states: "The program has a good return on investment."

Salix

The Salix fund has treated ULT freezers as an acceptable item to replace when meeting its requirement for a 10 year payback period. No case specific calculations are required when applying for the fund.

Discussion

Adopting the Bristol approach seems to meet a good balance, and is a tried and tested methodology which has been in place at Bristol for over a year now. It is recommended that a block grant of **£37,500** is ring-fenced from the Sustainable Campus Fund for funding efficiency improvements in the University of Edinburgh's stock of ULT freezers. This would provide up to 25 grants of £1,500. This calculation

¹ http://shovitemp.com/em/masco/green/july2016/index.php?article=together-emissions&utm_source=Web+Sign+Ups&utm_campaign=1e433bc3ee-August_2016_Newsletter&utm_medium=email&utm_term=0_e881688224-1e433bc3ee-156482333

is based on known requests within the University among Labs contacts. **The group's views are sought on implementing this.**

The benefits could potentially be widened and augmented by having different levels of funding available (e.g. £1,000, £1250 and £1500) for

1. Replacement of freezer with a more efficient model
2. Replacement of freezer with a more efficient model in addition to implementing a process to inventory all samples to be stored in the new freezer and dispose of old unnecessary samples, freeing up space as an additional benefit.
3. As per 2, but with the additional commitment to increase freezer temperature to -70°C or -75°C if contents allow (this will be entirely at the discretion of the sample owners and lab managers). We may wish to stipulate that the freezer must be connected to a remote monitoring and alarm system in order to provide advance warning of any problems (many labs have these systems already, but not all). Bristol have a standard that ULT freezers are set to -70°C, rather than -80°C unless there are specific reasons given for the lower temperature.

This would reflect the additional savings which would be made by the activities mentioned in points 2 and 3. **The group's views are sought on this.**

Resource implications

No additional resources are required, although it is requested that the Group consider the proposal to ring fence £37,500 of the £750,000 Sustainable Campus Fund available for allocation in 2016/2017. This would be reviewed in July 2017 and a further approach decided for 2017/2018.

Risk Management

Risk	Mitigation
Lack of awareness of the initiative, leading to issues of fairness in distribution.	Labs Sustainability Coordinator to feed back information to Sustainable Labs Steering Group and other labs networks.
Lack of uptake of the funding for freezer replacement.	Proposed figure is based on previously highlighted cases for freezer replacement. It is therefore unlikely to be lower.

Equality & Diversity

While Equality and Diversity are key to good practice it is not thought that the measures proposed in this paper require an Equality Impact Assessment.

Next steps/implications

If the Utilities Working Group wish to implement this proposal, actions will be taken by the SRS Engagement Manager with support from the Labs Sustainability Coordinator to bring applications for Sustainable Campus Fund funding to the group in subsequent meetings.

Consultation

Paper drafted by Labs Sustainability Coordinator and finalised by SRS Engagement Manager following consultation with Sustainable Labs contacts across the University about business needs and following research through national labs networks.

Further information

Authors

Andrew Arnott, Labs Sustainability Coordinator

Caro Overy, SRS Engagement Manager

Department for Social Responsibility & Sustainability

2 September 2016

Presenter

Caro Overy, SRS Engagement Manager

Department for Social Responsibility & Sustainability

Freedom of Information

This paper is open.

Appendix 2:

Cold Storage Funding Guidelines

We recognise that there are opportunities for improved energy efficiency in cold storage, but that often the savings do not stack up against Sustainable Campus Fund scoring. As such, funding for freezer replacement and top-up funding for the purchase of more sustainable freezers is available for the following:

Replacing an old ULT freezer with a new energy efficient model: The fund will supply annual savings multiplied by 7 up to a maximum of £1,500 – the remaining balance of costs must be made up by the applicant. Typical savings from replacing an old ULT are around £200 - £300 annually, so most applications should be eligible for close to the full £1,500 value. The applicant must prove the old freezer was operational (and energy consuming) before their grant will be transferred to them. They should also provide evidence that it has been retired correctly via provision of appropriate waste documentation within one month of receipt of the new freezer.

Purchasing an additional ULT freezer: The fund will pay the difference between a 'standard' and an 'eco' model, which typically equates to a payback of around 4 years. The grant awarded will be based on 4 times the expected annual savings (standard vs eco model). With current energy performance of new technologies, the grant available is likely to be a maximum of £400. Justification of the need for additional freezer space must be given, demonstrating that all existing freezer space is utilised to maximum capacity and all redundant items and samples have been removed. Comparative quotes and the energy consumption of the proposed eco model must be provided to allow us to determine the level of funding the Sustainable Campus Fund can provide.

Replacing an old -20°C freezer with a new energy efficient model: As per replacing an old ULT freezer, but the fund will only supply up to £100.

If you are interested in trialling other more sustainable cold storage techniques, please contact us for information or to share your ideas and solutions.

Each submitted case will be assessed by the SRS Projects Coordinator (Laboratories) upon completion of the below forms and their return to

Andrew.Arnott@ed.ac.uk

Sustainable Campus Fund

Freezer Replacement Form

Please complete the below form and return to Andrew.Arnott@ed.ac.uk to allow us to evaluate your case for funding

Request	Applicant Response
Age of freezer being retired and expected remaining lifespan (years)	
Daily average energy consumption (kWh) of freezer being retired (please measure with an energy monitor for minimum 24h – ideally 7 days)*	
Daily average energy consumption (kWh) of new freezer**	
Proof that the old freezer has been disposed of appropriately by provision of appropriate WEEE waste documentation within one month of receipt of new freezer.***	We agree to provide waste documentation within one month of receipt of the new freezer.
Confirm that a process is in place to inventory samples before they are placed in the new freezer to avoid storage of redundant samples and achieve maximum benefit from the space	
Confirm that the new freezer temperature is set appropriately. If samples can be stored at higher temperatures (e.g. -70°C instead of -80°C) this should be implemented upon installation of the new freezer.	

*Energy monitors can be requested from your on-site Energy Coordinator (<http://www.ed.ac.uk/about/sustainability/themes/energy/energy-coordinators/find>) or from the SRS department by contacting Andrew Arnott, Projects Coordinator (Labs) (Andrew.arnott@ed.ac.uk)

** Manufacturers data is acceptable, but if you have the opportunity to monitor the new freezer in-situ at your site that would be better.

*** <http://www.ed.ac.uk/estates/waste-recycling/how/electronic-waste> unlike other WEEE, in the case of fridges and freezers we do not want old units to be re-used within University of Edinburgh as this will negate energy savings. If you intend to reuse your existing fridge or freezer, you should follow the guidance for purchasing a new freezer (see form below)

Sustainable Campus Fund

Purchase of New Freezer Form

Please complete the below form and return to Andrew.Arnott@ed.ac.uk to allow us to evaluate your case for funding

*Manufacturers data is acceptable, but if you have the opportunity to monitor the new freezer in-situ at your site that would be better. **At the time of writing (November 2016) 15Watts/litre/day is considered good practice.**

Request	Applicant Response
Energy consumption of new freezer measured against capacity of freezer (watts/litre/day)*	
Confirm that a process is in place to inventory samples before they are placed in the new freezer to avoid storage of redundant samples and achieve maximum benefit from the space.	
Confirm that the new freezer temperature is set appropriately. If samples can be stored at higher temperatures (e.g. -70°C instead of -80°C) this should be implemented upon installation of the new freezer.	

What happens next?

1. We will review your application form within 2 weeks and confirm to you via email whether and how much funding could be provided.
2. Once you have been advised how much funding could be provided you should go ahead and purchase your new freezer.
3. If you are replacing an old freezer, rather than purchasing an additional freezer, you should dispose of the old freezer via appropriate routes (check with the Waste team if uncertain).
4. If you are replacing an old freezer, rather than purchasing an additional freezer, you should obtain documentation confirming appropriate disposal of your old freezer.
5. Send proof of new freezer purchase to Andrew Arnott in the SRS department (Andrew.arnott@ed.ac.uk)
6. Funds will be released to you as agreed via EIT.
7. If you are replacing an old freezer, rather than purchasing an additional freezer, you should send waste disposal documentation to Andrew Arnott in the SRS department (Andrew.arnott@ed.ac.uk) within one month of receipt of the new freezer. **Failure to do so may result in actions to reclaim the funds.**



Sustainable Labs Steering Group

19th March 2018

SLSG Programme Plan update (Jan 2017- Mar 2017)

Description of paper

This document is intended to give an update on progress against the objectives of the 2017-20 Sustainable Laboratories Steering Group Programme, which was drawn up to provide a structured approach to improving sustainability within laboratories at the University of Edinburgh over that time period, with a view to achieving wider University goals such as the Zero by 2040 target within the Climate Strategy. A Gantt Chart using a traffic-light colouring system (Red/Amber/Green) has been used to communicate quickly and clearly the progress which has been or is being made. In general this is taken to mean: green = on track, amber = delayed or problematic, red = objective is in danger of not being met, and grey = action scheduled for future work. Further details on the progress against each individual action is included within a table. This document will be updated prior to each meeting of the Sustainable Laboratories Steering Group.

The purpose of this report is to report against progress in relation to activities with further thought on monitoring of outputs and outcomes to be considered. The outcome objectives of the 3 year plan are noted below:

Action requested

SLSG is asked to note the progress described in this paper and provide any advice or guidance for further improvement.

Background and context

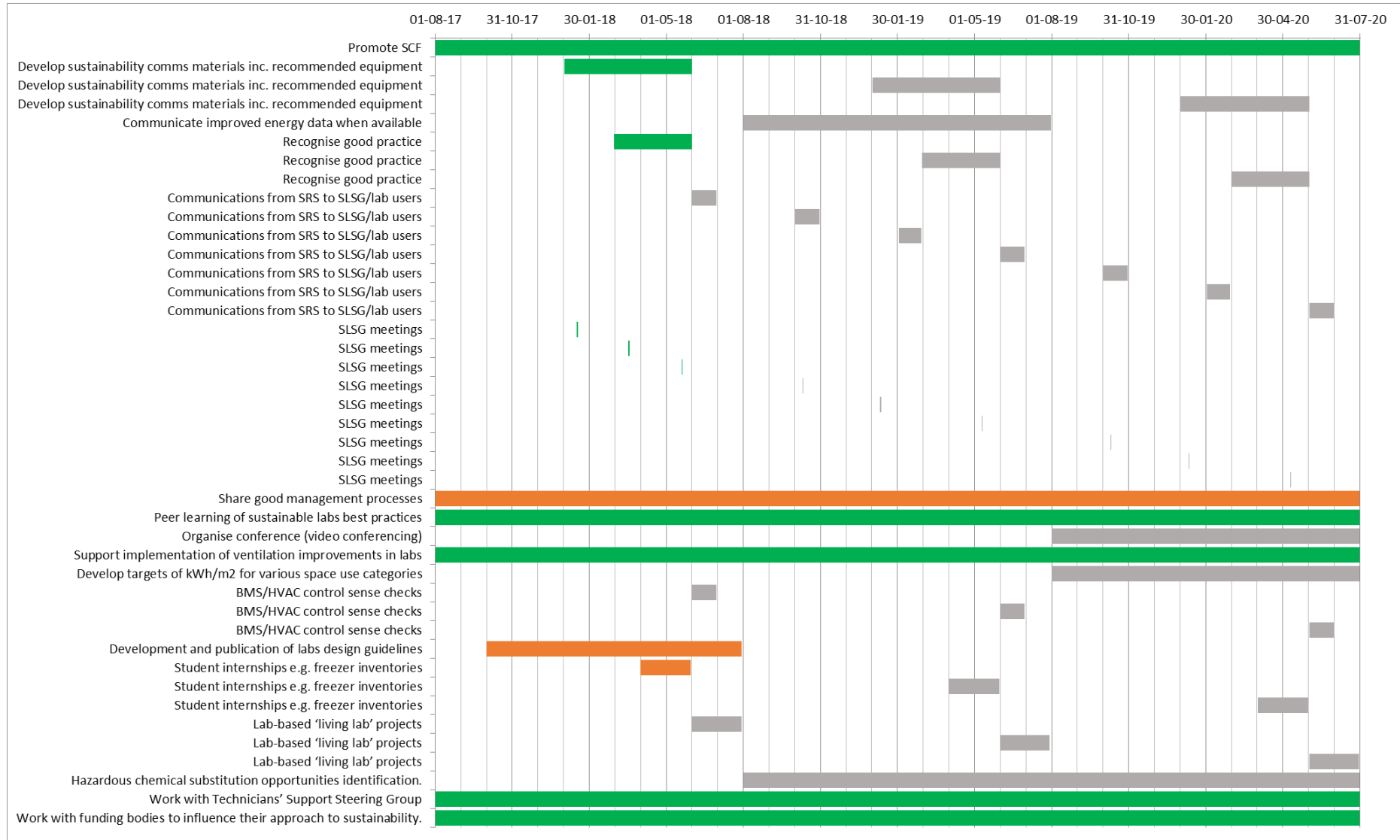
At the October 2017 meeting of the SLSG this 2017-2020 programme plan was presented and approved. This report notes the progress against this 3-year plan.

Outcome objectives:


1. 10% reduction in energy consumption.
2. Lab equipment reuse and sharing increased
3. Reduced consumption of materials, especially hazardous materials.
4. Enable culture of sustainable working through provision of support and training for lab technicians.
5. Adoption and use of sustainable building design guidelines (incorporating labs) and Soft Landings or similar approach.
6. 100% of labs covered by Edinburgh Sustainability Awards teams
7. By 2020 every building with labs will have an energy coordinator who is lab-based.



RAG Progress Reporting



Communications and Engagement

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
Promote use of the Sustainable Campus Fund	<ol style="list-style-type: none"> 10% reduction in energy consumption 3. Reduced consumption of materials, especially hazardous materials 	<ul style="list-style-type: none"> Robert MacGregor (seconded) Energy Office Estates Small Works Team 	<ul style="list-style-type: none"> Emails sent promoting the fund Verbal communications with colleagues, including via Sustainability Awards teams 	
Develop further sustainability communications materials for use by non-SRS staff including persuasive body of evidence to influence academics and lab users, as well as lists of recommended items of lab equipment (based on verified sustainability credentials)	<ol style="list-style-type: none"> 10% reduction in energy consumption. Lab equipment reuse and sharing increased Reduced consumption of materials, especially hazardous materials. 6. 100% of labs covered by Edinburgh Sustainability Awards teams 7. By 2020 every building with labs will have an energy coordinator who is lab-based. 	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> No publications yet but: Work to develop policies/guidance around ventilation and cold storage will feed into this project, and Work to determine effective communication methods (e.g. energy monitoring) will feed into this 	
Work with lab users/building managers to make use of improved energy data (when available) – e.g.	<ol style="list-style-type: none"> 10% reduction in energy consumption 	<ul style="list-style-type: none"> Energy Office Lab Users 	<ul style="list-style-type: none"> Improved data has not yet been made available, but this is not yet considered to be delayed. Where short term localised energy monitoring projects have been undertaken (e.g. IGMM and Roger Land) the energy data has been a useful communication and engagement tool. 	

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
communicating the data, setting targets				
Recognition of good practice via awards and/or other communications.	<ol style="list-style-type: none"> 10% reduction in energy consumption. Lab equipment reuse and sharing increased Reduced consumption of materials, especially hazardous materials. 100% of labs covered by Edinburgh Sustainability Awards teams 	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> Preparations are in progress for the Sustainability Awards ceremony at the end of March. 	
Regular communications between SRS and SLSG/lab users (e.g. newsletter or emails)			<ul style="list-style-type: none"> No action taken specifically relating to this, however similar work relating to the Technician Commitment may have overlap 	
SLSG meetings (strategic direction, project support and progress reporting)		<ul style="list-style-type: none"> SLSG members 	<ul style="list-style-type: none"> Suitable scheduling of meetings is taking place 	
Share good management processes – e.g. equipment sharing	<ol style="list-style-type: none"> Lab equipment reuse and sharing increased 	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> No specific promotion of this has taken place yet Future promotion could incorporate the guidance on equipment re-sale/re-use which hopefully will be approved for publication soon 	
Peer learning of sustainable labs best practices (via awards,	<ol style="list-style-type: none"> 10% reduction in energy consumption. Lab equipment reuse and sharing increased 	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> Awards audits have taken place with peer auditors 	

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
workshops, campus meetings) – including recruitment of awards teams and energy coordinators.	<ul style="list-style-type: none"> 3. Reduced consumption of materials, especially hazardous materials. 6. 100% of labs covered by Edinburgh Sustainability Awards teams 7. By 2020 every building with labs will have an energy coordinator who is lab-based. 		<ul style="list-style-type: none"> • Some awards teams are recruiting additional teams • C.60% of lab buildings have an energy coordinator based on recent analysis, however it is currently unknown if these energy coordinators are lab based. 	
Encourage and support organisation of a prestigious conference over video conferencing, potentially with support from The Wellcome Trust		<ul style="list-style-type: none"> • Lab Users • Academics • Funders 	<ul style="list-style-type: none"> • No specific action has been taken on this yet • Proposed for 2019-20 academic year 	

Utilities, Waste and Carbon

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
Support implementation of ventilation improvements in labs	1. 10% reduction in energy consumption.	<ul style="list-style-type: none"> Health and Safety Energy Office Estates small works team 	<ul style="list-style-type: none"> Some potential concern around the fume cupboard upgrade project at Joseph Black (already approved by for SCF funding) as heat monitoring data indicates lower savings possible (extending payback period to c.8 years). Still, many practical projects are in development/implementation phases (e.g. Demand Based Ventilation, fume cupboard upgrades, ensuring efficient new fume cupboards in new labs, chemical store upgrades) Feasibility work is assessing Wind Responsive Ventilation – due to report back in March 2018 Policy Statements and guidance notes are being developed 	
Develop targets of kWh/m2 for various space use categories	5. Adoption and use of sustainable building design guidelines (incorporating labs) and Soft Landings or similar approach.	<ul style="list-style-type: none"> Estates Development Estates Operations Contractors (Cundalls and Henry Gun-Why) 	<ul style="list-style-type: none"> Due for action 2019-20 	
BMS/HVAC control sense checks programme extended to further lab spaces (incorporating checks of	1. 10% reduction in energy consumption.	<ul style="list-style-type: none"> Energy Office (controls) Lab Users 	<ul style="list-style-type: none"> Scheduled for action each summer 2018, 2019 and 2020. 	

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
biohazard category activities)				
Engage with lab users on development and publication of labs design guidelines	5. Adoption and use of sustainable building design guidelines (incorporating labs) and Soft Landings or similar approach.	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> Delays in developing the Edinburgh Standard due to some long-term sickness among key stakeholders. Still hopeful for completion Q4 2017-18, or Q1/Q2 2018-19. 	

Living Labs projects


Activity	Associated Outcome	Colleagues supporting	Comments	RAG
Recruitment and implementation of student (paid) interns for freezer inventories and/or other laborious semi-skilled work.	<ol style="list-style-type: none"> 10% reduction in energy consumption. Lab equipment reuse and sharing increased Reduced consumption of materials, especially hazardous materials. 	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> No action has been taken on this yet. Timescales are uncertain, but it is thought time might be running out to get funds for paid internships approved in time to advertise them in April/May for commencement in July 	
Support lab-based 'living lab' sustainability projects (DNA, lighting, freezers)	<ol style="list-style-type: none"> 10% reduction in energy consumption. Lab equipment reuse and sharing increased Reduced consumption of materials, especially hazardous materials. 	<ul style="list-style-type: none"> Lab Users Estates 	<ul style="list-style-type: none"> Scheduled for action each summer 2018, 2019 and 2020. Discussions have started around DNA storage Long-term cold storage project (-60, -70 and -80) is ongoing (expected publication 2020) Energy efficient equipment replacements (SCF) are being monitored 	
Hazardous chemical substitution	3. Reduced consumption of materials, especially hazardous materials.	<ul style="list-style-type: none"> Lab Users 	<ul style="list-style-type: none"> Scheduled for action commencing in 2018-19, and continuing in 2019-20. 	

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
opportunities identification.				

Technical Staff

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
Work with Technicians' Support Steering Group to improve CPD, career development and community cohesion of technical staff.	4. Enable culture of sustainable working through provision of support and training for lab technicians.	<ul style="list-style-type: none"> • Technical Staff • Technical Managers • IAD • HR • Academics 	<ul style="list-style-type: none"> • University of Edinburgh has signed up to the Technician Commitment • The TSSG is working with Val Gordon (seconded to work on Technician Commitment for 10h/wk) to develop and implement an Action Plan incorporating a website, events, CPD, Professional Registration, newsletters, emails 	

Funders

Activity	Associated Outcome	Colleagues supporting	Comments	RAG
Work with funding bodies to influence their approach to sustainability.	<ol style="list-style-type: none"> 1. 10% reduction in energy consumption. 2. Lab equipment reuse and sharing increased 3. Reduced consumption of materials, especially hazardous materials. 4. Enable culture of sustainable working through provision of support and training for lab technicians. 5. Adoption and use of sustainable building design guidelines (incorporating labs) and Soft Landings or similar approach. 	<ul style="list-style-type: none"> • Lab Users 	<ul style="list-style-type: none"> • SRS department personnel are involved in discussions with Wellcome Trust on a bilateral and multilateral (via the UK-wide Lab Efficiency Action Network) basis. • No firm progress yet but our suggestions have been well received. 	

Resource implications

No resource implications are related to reporting on progress against this plan. Implementation of the plan will have wider resource implications, which have been detailed elsewhere.

Risk Management

No risks associated with reporting on progress against this plan. No items on the plan are currently at risk of failure (red graded).

Equality & Diversity

No foreseen impacts.

Next steps/implications

A further progress report will be provided at the next SLSG meeting by the SRS Project Coordinator - Labs. During that time further actions will be taken towards the outcome objectives of the plan.

Consultation

Michelle Brown – Head of Programmes - Department for Social Responsibility and Sustainability

Chris Litwiniuk – Engagement Manager - Department for Social Responsibility and Sustainability

Further information**Author and Presenter**

Andrew Arnott

SRS

March 2018

Freedom of Information

This is an open paper.