



SLSG Planning and Visioning Workshop Agenda

14:00 – 16:00, Tuesday 3rd October 2017

Elder Room, Old College

AGENDA

- 1 Welcome, Introductions, Purpose and Aims of Meeting**
The Director of SRS will outline the programme for the session
- 2 Minute** **A**
To approve the minute of the previous meeting on 29th May 2017
- 3 Matters Arising**
To raise any matters arising not covered on the agenda or in post-meeting notes

SUBSTANTIVE ITEMS

- 4 Sustainable Labs Vision and Programme Plan** **B**
To approve a paper from the SRS Projects Coordinator - Labs describing the medium-term plan and long-term vision for sustainable labs at University of Edinburgh, based on outputs from the 1st May planning meeting and comments from 29th May SLSG meeting
- 5 Findings from Energy Audits** **Verbal**
To receive a verbal update from SRS Projects Coordinator (Labs)
- 6 Estates Development sustainability guidelines development** **Verbal**
To receive a verbal update from the Director of SRS
- 7 Ventilation policy initial discussion** **Discussion**
To engage in a discussion about the content and strategic aims of a ventilation policy, as described in the Programme Plan
- 8 Cold storage policy initial discussion** **Discussion**
To engage in a discussion about the content and strategic aims of a cold storage policy, as described in the Programme Plan (to include possible engagement campaign raising awareness of -70 storage in 2018)
- 9 Edinburgh Sustainability Awards update** **Verbal**
To receive a verbal update from the SRS Engagement Manager
- 10 Improving support for Technical staff careers** **Verbal**
To receive a verbal update from the SRS Projects Coordinator (Labs)
- 11 Update on lab equipment re-use/re-sale procedure** **Verbal**
To receive a verbal update from the Category Manager (Labs and Medical Procurement)

ROUTINE ITEMS (verbal)

- 12 Any Other Business**
To consider any other matters from Group members including:
 - *Sample Databases*

UNIVERSITY OF EDINBURGH

MINUTE OF A MEETING of the Sustainable Laboratories Steering Group held in the Cuillin Room, Charles Stewart House on Monday 29 May 2017.

1 Welcome and Introductions

The Convener welcomed attendees to the seventh meeting of the Group and outlined the agenda for the session.

2 Minute

The minute of the meeting held on 12 December 2016 was approved as a correct record.

Actions carried forward

Action – AA & CO to follow up with David Gray on links to Impact Committee.

3 Matters Arising

A £20K Freezer Replacement fund had been set up within the Sustainable Campus Fund for replacement of old inefficient units. A freezer fund update was circulated on 29th May, including the replacement criteria (also available on the [website](#), along with an application form). Some notes of interest had been received, though there had been no draw down as yet. Retrospective applications would be accepted, provided they met the criteria.

Action – All members to make colleagues aware of the existence of the fund.

SUBSTANTIVE ITEMS**4 Sustainable Labs Vision and Programme Plan**

A meeting was held on 1st May to focus on developing a medium-term plan and long-term vision for sustainable labs at the University of Edinburgh. A 3-year project plan would be put in place to meet the interim vision to 2020, including targets and KPIs, as well as a longer term vision to 2040, in line with the University's Climate Strategy and zero carbon goals. Both comprised actions across three categories: buildings and energy; communications and engagement; and practices.

Key elements included: influencing building design to optimise sustainability and operational functionality, developing new design standards, and encouraging uptake of the Sustainable Campus Fund to facilitate improvements. Improved internal communications would share developments, promote good news stories and facilitate communication to technicians, including events and training opportunities. By 2020 there were aims to see full participation in the Lab Awards, develop and publicise a body of evidence around sustainable equipment, and work with Schools and Colleges to integrate sustainability into their plans.

By 2040 good practices in design standards should enable delivery of low carbon and net positive buildings, with soft landings as standard, waste heat reclamation, better understanding of the needs of building users, and better briefings for contractors. Improved energy data would allow better metrics and measurement. Aims included non-SRS people spreading SRS messages, development of a sustainable equipment register, and roll out of shared services across the University (e.g. waste disposal,

A

B

freezer farms, washing/sterilisation). Aims included running a prestigious conference over video-conferencing technologies, and having many active living lab and student projects. In future sustainability elements may be a requirement for funding bodies.

Action – AA to formalise output into a 1-year, 3-year and long-term Labs plan, to be in place by 1st August.

Post-meeting note: discussed under item 4.

Action – AA to bring forward the soft landings goal, include space utilisation, and factor in data driven innovations to long term aspirations.

Action – All members to pass on their feedback and ideas to AA by 3rd July.

SLSG noted the difficulties inherent in planning to 2040, when science would be very different. Other University planning tended to be for 10 years, and thinking further down the track was problematic. With the number of students increasing, it would be important to ensure provision of sufficient quantity and quality of lab space in the long term. Labs were expensive to build and run, and their carbon impact could be significant, so it was important to use the space well, and share facilities where practical. There was a 60% usage target for teaching spaces. While some were used beyond that, there were constraints that made this difficult to achieve in some areas, in which case the aim was to make the best use of existing space to the maximum efficiency that could be evidenced. It was not thought to be likely that UoE could consolidate and bring campuses together within this timeframe.

More time would be spent on messaging, as this was not going out universally, and there were pockets of good practice that were not being captured. It was more difficult to access people in labs, and more thought would be given on how to improve this.

5 Lab Awards: Change from S-lab to NUS criteria

Part of the overarching Sustainability Awards Scheme designed to recognise and reward good practice, the Lab Awards were transitioning from S-Lab criteria to NUS Green Impact Sustainable Laboratories criteria, developed by Anna Lewis at the University of Bristol. The NUS scheme targeted HEIs but with a broader outlook, in line with the sustainability sector standard, with criteria that were more numerous, robust, and up to date. There were no cost implications as the online platform had been developed in-house and the content was open source. Some teething problems were anticipated in the first year. The NUS criteria were being adopted across the sector, particularly within the Russell Group. With the aim of having one nationally recognised scheme, UoE risked being left behind, with out of date criteria, if it did not adopt the NUS criteria.

Action – AA to recirculate the new criteria to the Group.

6 Engagement with Wellcome Trust

Meetings had taken place in April with contacts at the Wellcome Trust tasked with investigating what best practice looked like in sustainable labs and sustainability in universities. They would report back, and WT would decide whether to include this in what they asked of their grant recipients. WT were leading other research councils in this area. The investigation was in its early stages and changes may not go ahead. There had been a meeting in London between the WT and the cross-Russell Group Lab Efficiency Network.

While SLSG noted concerns about the additional burden in terms of research admin that this would occasion, the SRS Department had capacity to support Schools and

Colleges with this extra work. Some bodies were already asking for a statement from institutions outlining their procurement practices.

Action – GS to share a small sample of text supplied for these applications.

Action – DG to share any updates with the Group.

7 Lab Equipment re-use process update

One output of the reuse workshop in October was development of a flowchart indicating what to do with items that were no longer needed but still worked. This would shortly be finalised and posters made available to display in labs indicating the right legal process to follow.

Action – AA to share the final draft with the Group.

The warp-it reuse portal was not working as well as it could, with automatic alerts not being issued.

Action – CO to look into the issue and report back.

There were legal implications around the disposal of assets funded by others (such as funding councils), and it was not a given that UoE could retain the proceeds from such sales. Written permission from the funder had to be secured before any major asset sale. Legal services were feeding in on the process.

Action – AA to recirculate the document, changing wording to “funded”.

Action – All members to review the process and feed back to AA.

8 SFC bid – update and request for suggestions

The Scottish Funding Council were about to launch a £20M low carbon fund offering 0% loans for shovel-ready projects, with bids due over the summer, decisions to follow in the autumn, and funds to be spent by March 2018. UoE would look to submit a portfolio in the £1-5M range, redirecting some projects from the Sustainable Campus Fund, possibility including Aircurity, solar PV, and outputs from the new energy audits. The advice of the RELCO group would also be sought.

Action – All members to send their ideas to CO.

9 Improving support for Technical staff careers

The Technical Staff Steering Group had met five times since November, taking its remit from a paper to the People Committee. It had a diverse membership and was looking to expand this to include representation from every School and Department that had technicians (including ECA). Exploratory emails had been sent to groups that were not yet represented. Efforts were ongoing to liaise with HR to automatically update email lists when members left the University. The lists included technicians and managers of technicians. Meetings were planned with colleagues at other institutions, including Janet Milne at Strathclyde, who developed a two-year programme for technicians, and Terry Croft at Sheffield, who was working on a toolkit with HEFCE.

A dedicated webpage was being developed which IAD or HR would host. This would describe the work done by technicians, courses available, news and reports. It was not obvious from the wording of the IAD website that they offered courses that were open to technical staff. Future actions included the proposed secondment of a member of technical staff into HR. The overall aim was to become employer champions, recognised by the Science Council. This would involve expanding internal

training, with a pilot to be run on technicians' uptake of CPD courses by campus or location, and support offered to staff who want to achieve professional registration. Isolation among technical staff was a core issue to be addressed. A figurehead within UoE was needed to give this work visibility. Apprenticeship schemes would be expanded, a survey would be issued to technical staff in order to better understand their needs, and questions on technicians would be included in existing surveys.

Action – AA to follow up with Jenni Dixon in HR on modern apprenticeships.

Action – AA to circulate 2-page briefing.

Action – All members to contact AA with suggestions for a suitable champion for the scheme, which should be a senior academic active in the field.

10 Estates Development sustainability guidelines development

Investigation of the standards set for University buildings had begun last year, looking at the issues from a sustainability perspective. Work was proceeding, and labs would be considered as a major part of the process. SLSG would be updated on developments.

11 Lab equipment selection for sustainability

Desk-based research had been carried out into the most efficient versions of different types of laboratory equipment (principally CO₂ incubators, glasswashers, and sterilising ovens), producing a useful resource for staff interested in buying or trialling more efficient equipment. SRS would support this through the Sustainable Campus Fund and by tracking and monitoring available information which could be used to inform future purchases. Whole life costing was integral to procurement processes, including utilities costs and import duties.

Action – AA to work with AK to continue to build a body of knowledge.

Action – All members wishing to suggest items for assessment to contact AA.

12 Freezer Inventories – Student Summer Internships?

Work drawing up freezer inventories was one option for students looking for academic-linked summer placements (this would be paid work). The Wellcome Trust carried these out every summer to get rid of old samples.

ROUTINE ITEMS (verbal)

13 Any Other Business

Sample Databases

The Group discussed interest in adopting a database capable of identifying and locating samples within freezers. Such a system had been procured at Chancellor's Building, a chemical management system was already in place, and another had been developed within the Health & Safety Department which was starting to be rolled out for biological samples down to fridge level. The key issue was management, with a hierarchy needed to co-ordinate it University-wide. Projects of this type had previously been put to central IS.

Action – JR to add this issue to the agenda for the next meeting on 3rd October.

C



Sustainable Labs Steering Group

3rd October 2017

Sustainable Labs Vision and Programme Plan

Description of paper

This paper describes the medium-term plan and long-term vision for sustainable labs at University of Edinburgh, based on outputs from the 1st May planning meeting and comments from 29th May SLSG meeting.

Action requested

SLSG is asked to approve the paper.

Sustainable Labs Steering Group Programme 2017-2020

Overview

This programme is part of the collection of programmes operated by the Department for Social Responsibility and Sustainability.

The Sustainable Labs Steering Group consists of members from the Department for Social Responsibility and Sustainability (SRS), Estates, Procurement, Health and Safety, and various representatives from labs and academic staff. It was formed in January 2015 to identify, direct and facilitate sustainability improvements in laboratories across the University of Edinburgh. Further details on the remit and membership of the group are provided in the annexes to this document. At the end of 2016 after two successful years the Sustainable Labs Steering Group (SLSG) was asked to consider moving from single year plans to multi-year plans which could be more strategic, ambitious and impactful. This new plan aims to harmonise with University of Edinburgh's other strategic aims and to align with academic year timescales.

This document sets out the intended aims, objectives and tasks of the group in the three academic years from 2017-18 to 2019-20, along with proposed timings and the expected outputs and outcomes. In addition a vision of success is described, along with a view towards sustainable labs practices in 2040 (aligning to the Climate Strategy goal of zero carbon by 2040).

The work of the SLSG is facilitated by SRS but also involves substantial input from a broad cross-section of the university's research community and corporate services. This input and support is also detailed in the document. Successful implementation of the planned actions described in this document will ensure the SLSG will make a substantial contribution to improving sustainability and reducing costs across laboratory areas of the University of Edinburgh, complementing University-wide strategic plans and objectives.

Vision:

University of Edinburgh laboratories shall be international exemplars in energy, water and resource efficiency, and shall enable world class science teaching and research in a healthy working environment. The Sustainable Labs Steering Group shall be a respected and effective agent for change internally and externally. Our broad base of members shall work together with experts within the University of Edinburgh in a 'living labs' approach to identify and implement such practices as may be necessary to enable University of Edinburgh laboratories to be among the most sustainable globally. The aims and activities of the Group shall align with and complement the scientific and research aims of the University of Edinburgh, along with other University-wide strategic plans and objectives.

Programme goals 2020:

1. University of Edinburgh laboratories shall be recognised as among the most sustainable globally.
2. Low carbon through optimised utilities use and maximised reuse.
3. Understanding of SRS issues in labs supply chain.
4. Sustainably designed and managed labs which enable and promote world-class science.

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.

Outputs:

1. Sustainable ventilation policy developed to provide a coherent approach.
2. Sustainable cold-storage policy developed to provide a coherent approach.
3. Demand-based ventilation, and other ventilation improvements in place.
4. SCF funded projects

5. Targets of kWh/m² for various space use categories
6. School/College plans incorporating actions to work towards 'zero by 2040'
7. Energy data communications in lab areas
8. BMS, HVAC control adjustments resulting from review
9. Freezer inventories generating new free space in cold storage
10. Lab equipment re-use process and associated communications
11. Conclusion of hazardous chemical substitution project(s).
12. Website for technical staff, including social and professional opportunities
13. Design guidelines (with a focus on lab ventilation, querying requests for 24/7 access, and consultation/involvement of lab users during design)
14. Increased reach of sustainability communications.
15. Sustainable labs best practice embedded within standard practices
16. Living Labs study reports
17. Sustainability communications materials developed for use by non-SRS staff
18. Conference hosted over video conferencing technologies
19. Increased awareness of and promotion of sustainability from funders to academics/institutions

Activities 2017-2020:

Communications and Engagement

1. Promote use of the Sustainable Campus Fund
2. 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)
3. Work with lab users/building managers to make use of improved energy data (when available) – e.g. communicating the data, setting targets
4. Recognition of good practice via awards and/or other communications.
5. Regular communications between SRS and SLSG/lab users (e.g. newsletter or emails)
6. SLSG meetings (strategic direction, project support and progress reporting)
7. Share good management processes – e.g. equipment sharing
8. Peer learning of sustainable labs best practices (via awards, workshops, campus meetings) – including recruitment of awards teams and energy coordinators.
9. Encourage and support organisation of a prestigious conference over video conferencing, potentially with support from The Wellcome Trust?

Utilities, Waste and Carbon

10. Development of ventilation policy
11. Development of cold storage policy
12. Support implementation of ventilation improvements in labs
13. Develop targets of kWh/m² for various space use categories

14. BMS/HVAC control sense checks programme extended to further lab spaces (incorporating checks of biohazard category activities)
15. Work with Schools/Colleges to ensure School/College plans describe how the School/College will play its part in achieving 'zero by 2040'
16. Engage with lab users on development and publication of labs design guidelines

Living lab projects

17. Recruitment and implementation of student (paid) interns for freezer inventories and/or other laborious semi-skilled work.
18. Support lab-based 'living lab' sustainability projects (DNA, lighting, freezers)
19. Hazardous chemical substitution opportunities identification.

Technical Staff

20. Work with Technicians' Support Steering Group to improve CPD, career development and community cohesion of technical staff.

Funders

21. Work with funding bodies to influence their approach to sustainability.

Indicators:

1. Awards received for our sustainable labs programme (local, national and global)
2. University carbon emissions figures and reuse figures for labs commodity
3. Number of utilities efficiency projects identified through labs at project development stage or beyond/£ & CO2e savings from projects
4. Lab based energy coordinators in all labs buildings
5. Sustainable design guidelines used in all building developments incorporating labs.
6. Lab users participation in WARPit and/or authorised external reuse scheme.
7. Approach to labs within Procurement Strategy and evidence of action among suppliers
8. Processes reviewed to identify substitution opportunities to reduce hazardous materials.
9. Support in place to enable positive working culture and sustainable practices for lab technical staff
10. % of labs across the uni engaging with SRS.
11. Number of labs covered by Sustainability Awards teams
12. Number of people reached through meetings and events
13. Studies published and communications circulated

Sustainable Labs in 2040

Energy, water and material wastage are eliminated through well controlled efficient plant, renewable energy generation, and policies to describe and ensure good practices. Material consumption is reduced through many shared services including: equipment, sterilisation, waste management, cold storage, consumables stores. Fewer buildings are accessible 24/7 (associated reduced energy consumption, as well as improved staff/student working conditions and security). Numerous 'living labs' projects are operational, ensuring the in-house expertise of our academics can inform operational practices, and vice-versa. Travel is decoupled from academic success and status through use of alternatives such as video conferencing technologies.

Further information

Author and Presenter

Andrew Arnott

SRS Projects Coordinator (Labs)

Department for Social Responsibility and Sustainability

Paper written on 29th August 2017

Freedom of Information

This is an open paper.

Annex A

Sustainable Laboratories Steering Group – remit and membership

A remit and membership for SLSG had been approved by the Sustainability Operations Advisory Group on 5 November 2014.

“The main purpose of the Steering Group would be to provide expert guidance and direct the expanding remit of work associated with sustainable laboratories. It would ensure that work on sustainable laboratories is continued through a coordinated approach. The proposed Steering Group would:

- Provide expert guidance to the Labs Sustainability Coordinator
- Contribute towards setting future objectives and monitoring progress
- Identify funding opportunities to support sustainable laboratories work
- Achieve buy in from academic schools, support groups and research centres
- Link sustainable laboratories agenda with University-wide strategic plans and objectives.

The Steering Group would aim to bring together colleagues from across university academic schools and support groups with expertise in laboratory practices and systems.”

At the inaugural meeting it was proposed that a core steering group be established with additional representatives joining for themed meetings which would help develop strategy and advise on activities for the Labs Sustainability Coordinator. A wider mailing list of interested supporters would be maintained.

Practices were developed and refined over 2015 and 2016 resulting in the ‘themed meetings’ being changed to themed workshops open to all, and advertised broadly to SLSG members along with lab users. As such the SLSG consists now (July 2017) of only the core steering group, while a wider mailing list of interested supporters is used to advertise the workshops.

CORE GROUP MEMBERSHIP

Andrew Arnott	SRS Project Coordinator - Labs
Dave Gorman	Director of Social Responsibility & Sustainability
David Gray	Professor of Immunology, Institute of Infection & Immunology Research
David Jack	Energy Manager
Martin Crawford	Controls Manager
Andy Kordiak	Equipment Procurement Manager, MVM
Sandra Lawrie	Technical Services & Estates Manager, School of Biological Sciences
Candice Schmid	Health & Safety Adviser
Valerie Gordon	Technical Officer, Institute for Education, Teaching & Leadership
Brian McTeir	Easter Bush Campus Facilities and Services Manager
Stewart McKay	Technical Services Manager, IGMM
Angela Ingram	Operations Manager, IGMM
Janet Philp	Head of Administration, Deanery of Biomedical Sciences
Graham Bell	Estates Depute Director, Head of Estates Development
Heather Anderson	Senior Technical Officer, CMVM
Grant Ferguson	Assistant Director of Estates, Head of Estates Operation
Matthew Sharp	CBS Operations Manager
Guy Lloyd-Jones	Forbes Professor of Organic Chemistry
Lee Murphy	Manager, Genetics Core Lab, Wellcome Trust Clinical Research Facility
Position Vacant	Student Researcher