

UNIVERSITY OF EDINBURGH



MINUTE OF A MEETING *of the Sustainable Laboratories Steering Group held in Room 2.01 Geography (Old Infirmary) on Monday 27 May 2019.*

Members: Dave Gorman, (Convener), Director of Social Responsibility and Sustainability
Andrew Arnott, Engagement Manager
Rachael Barton, SRS Projects Coordinator
David Brown, Technical Services Manager, School of Chemistry
Michelle Brown, Head of SRS Programmes
Dean Drobot, Head of Energy and Utilities Management
Joanne Dunne, Early Stage Researcher
Grant Ferguson, Director 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 & Utilities Operations Manager
Andy Kordiak, Laboratory & Medical Equipment & Consumables Team Manager
Julia Laidlaw, Estate Development Manager
Sandra Lawrie, Technical Services & Estates Manager, School of Biological Sciences
Guy Lloyd-Jones, Forbes Chair of Organic Chemistry
Robert MacGregor, Energy Engineer, Utilities Management
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
Thomas Reynolds, Chancellors Fellow in Civil Engineering
Candice Schmid, Occupational Hygiene and Projects Manager
Matthew Sharp, BVS Deputy Director - Business

In attendance: Evan Morgan, Design Informatics Research Software Engineer, for item 7

Apologies: Dave Gorman; Rachael Barton; Dean Drobot; Joanne Dunne; Grant Ferguson; Kate Fitzpatrick; Simon Santamaria Garcia; David Gray; Yuner Huang; Angela Ingram; Julia Laidlaw; Guy Lloyd-Jones; Robert MacGregor; Lee Murphy; Janet Philp; Matthew Sharp

1 Minute

A

In the absence of the Convener, the Head of SRS Programmes welcomed attendees to the fourteenth meeting of the Group.

The minute of the meeting held on 28 January 2019 was approved as a correct record, subject to one amendment.

Action – JR to amend previous minute to include apologies from MB.

2 Sustainable Campus Fund Projects

B

SLSG noted this paper, which covered the overall financial performance of the Campus Fund, set up three years ago with the agreement of Estates Committee as an energy and carbon efficiency vehicle for the University. Sections 9 and 10 of the paper focused specifically on lab projects. Overall, labs were continuing to contribute a significant pipeline of projects to the fund, second only to lighting. The SCF included a specific sub-fund for freezer upgrades, which had now been fully subscribed and top-up funding agreed.

Since January's meeting the Joseph Black fume cupboard upgrade had gotten underway and was progressing well. Premier had been contracted to carry out this work, moving 28 cabinets to variable flow, and replacing fluorescent lights with LEDs. Some of the cabinets were double width, making it more challenging to fit controls. This project could serve as a pilot for similar projects to be rolled out as far as possible across the University. User, electrical and thermal monitoring would be used to assess the success of the pilot, in addition to monitoring through the BMS.

Action – AA to share early findings from the Joseph Black project at the next meeting.

3 Sustainable Labs Programme Plan with RAG Status Update

C

All activities were at green status, with the exception of BMS control sense checks which had been missed in summer 2018. This would be picked up in summer 2019. There were currently two buildings under consideration.

As the Plan was now entering its final year, members agreed the Engagement Manager's proposal to hold a workshop at the next meeting to share ideas and agree basic principles for the ensuing plan, submit a first draft to the 25th November meeting and a final version for adoption early in 2020.

4 Summer Internship Proposals

D

The SRS Department had agreed to host two internships over summer 2019. One, co-sponsored with the College of Science and Engineering, would focus on mapping sustainability activities within the College. This would be a 12 week internship, starting in early July. The CSE contact would be Duncan Herd. Initial contact with schools would be through Directors of Professional Services.

Post-meeting note: SRS Coordinator Rachael Barton confirmed that the CSE contact would be Bruce Nelson rather than Duncan Herd.

Action – All members in or working with CSE who can summarise sustainability activity within a particular area to pass this on to AA.

The second would be a repeat of the freezer internship, hosted in labs and running for a total of 8 weeks. The intern would undertake practical tasks including defrosts and restocking, cleaning filters and heat exchanger fins, inventorying contents and identifying old samples for disposal. SRS were looking for volunteers to host the intern in their lab for a period of time dependant on the size of their fleet of freezers.

Action – All members willing to host the intern to get in touch with AA.

Action – All members aware of any technicians involved in hosting interns to pass details on to VG.

5 Lab Procurement - Equipment Re-use/Re-sale Process

The Laboratory & Medical Equipment & Consumables Category Team Manager updated SLSG on progress developing the reuse/resale process. In the past Procurement had investigated a number of ways of disposing of unwanted assets, including trading them

in against new procurement, donating internally and externally, using Warp-it, and Waste Electrical and Electronic Equipment recycling. Recently there had been a particular focus on selling outwith the University. One significant hindrance had been the absence of a process approved at senior level to point to. Two years ago multi-department discussions began to develop a flowchart and FAQs to support and advise colleagues through this process. Engagement with the Colleges had been helpful, with College Registrars particularly supportive.

Issues raised 18 months ago around disposal of items funded from exchequer funds had now been resolved, with assurances received that this would not be relevant to lab procurement (it focused mainly on land, with values from around £3M). In a few cases Procurement had gone to some lengths to secure permission to sell from donation sources.

Regarding ERDF-funded items of equipment, the general advice was to be proportionate (no Scotland-specific advice was available). Procurement had a good awareness of larger European Regional Development Fund projects and would be able to continue to keep an eye on these as they progressed.

Legal Services had provided advice around balancing value and the risk associated with selling goods, and had revamped the terms and conditions for University selling. The process had been a good example of inter-departmental cooperation, and a shared file location would be set up to store contract documents, accessible by Estates, SRS, Procurement and Legal Services.

Initially it was felt that for items below a threshold of £10K the effort involved in selling outweighed resale value, however some cases had been raised where resale would be very straightforward, and so this threshold had been scrapped and each individual case would be assessed on its own merits. Procurement and Legal Services would review cases in the first instance, looking to donate or reallocate where sale was not justifiable. One of the first recommendations would be to reuse internally.

At this time the process would not address the area of useful equipment of very low resale value. Advertising equipment was also not currently being covered – the onus was on users wanting to sell to find a buyer. UoE would also not be using companies to sell on its behalf.

In terms of next steps, the flowchart and FAQs needed minor amendments before finalisation. The Head of Court Services had recommended going down the process route rather than policy. A committee paper was currently being drafted which the Director of SRS would be asked to present to the University Executive.

SLSG thanked the Category Team Manager for providing useful clarity on this topic.

Action – AK to circulate the paper to this group for consultation before it goes forward to University Executive.

6 Technician Commitment update

SLSG was updated on progress across various activities to fulfil UoE's obligations under the Technician Commitment, including enhancing the visibility of technicians and their contribution, supporting them to gain recognition through professional registration, enabling career development opportunities, and ensuring the future sustainability of technical skills across the organisation.

Events had been held at QMRI, Informatics, and KB, with another one scheduled for 4th June at ECA. Local groups had been active, and a Technical Staff Professional

Registration Workshop planned for 30th May already had over 20 participants. A budget had been secured for technical staff to access professional registration. UoE was on track to secure employer champion status. A number of technical staff had signed up to participate in the Foundation Apprenticeship scheme for school pupils in Fifth and Sixth Year. Talks were ongoing to secure a senior sponsor, though details could not yet be confirmed. A paper would be prepared to update People Committee on progress and outline a framework for future activities.

Action – All members wanting to feed in to the paper to contact VG.

7 LILEE Distribution Project – Next Phase

The Design Informatics Research Software Engineer outlined the background to this behaviour-based living lab project. The interface was an Internet of things (IoT) device for the management of lab equipment. Six units were currently installed at Roslin Institute. Using their ID card to access the interface, staff could use the device to book equipment. It also suggested options for equipment sharing.

The project had received additional funding from SRS and the University's newly formed IoT Research and Innovation Service to roll out the devices more widely and was looking for labs willing to participate in trials. Project staff would provide support to customise the device to the needs to each lab's users. The interface could be attached to any piece of equipment and its features customised appropriately.

The devices allowed for greater transparency, allowing visibility of who was using equipment and when, and whether they were willing to share capacity. Allowing users to share capacity on an existing booking made for much more efficient use of lab equipment. The project had seen a 20-25% reduction in equipment use, generating annual savings of £60 - £120 per device. There had been a 93% acceptance rate when users were offered the opportunity to share equipment.

In future, the project team would like to look into adding the ability for LILEE to connect to Bluetooth, allowing it to get equipment to operating temperature in time for bookings, or turn it off when not required. It could also tie in to cold storage management. The devices could also be used to restrict access to users who had attended relevant training. While the scope for adding additional features was vast, the focus currently was on rolling LILEE out further to get more interaction in its current capacity as a booking device. Devices would go into labs over the next few months, and be trialled for around a year.

Action – All members to spread the word and encourage more labs to participate in trials, particularly areas with high energy use equipment, where there were opportunities for sharing. Interested parties to contact e.morgan@ed.ac.uk.

Action – JR to invite the Design Informatics Research Software Engineer to report back on progress at September's meeting.

Post-meeting note: invitation accepted on 6th June.

8 Lab Plastics Overview

A member of staff had been secured to work on lab plastics one day a week for six months. A [survey](#) was currently running on the SRS website aimed at developing a baseline on what was currently being done on lab plastics and identifying pockets of good practice. In addition to the survey, desk-based research was being conducted on best practice internally and externally which would then form the basis of a communications campaign. One area targeted for improvement was re-education

around when lab plastics were not contaminated and could go into the usual recycling streams. An action plan for future work on lab plastics would be drawn up, including promoting glass alternatives where practical and where these offered a good sustainability saving over their life cycle as compared to plastics. Ideally SRS would like all members of staff working with lab plastics to complete the survey.

The Group recognised this as an important area of work, with the overall aim of phasing out non-recyclable plastics where possible by 2030.

Action – All members to help spread the word about the survey, particularly to colleagues in Science & Engineering.

Action – All members aware of examples of good practice to pass these on to Kerry.Cheek@ed.ac.uk.

9 Ashworth Energy Monitoring Project Proposal

SRS were working with Building Manager Claudia Schaffner on a new energy engagement monitoring project. Firstly monitoring would be set up on certain electrical circuits and a baseline measured. Claudia was working with Robert MacGregor in Estates to identify areas that were electrically isolated and had discrete user populations. The fourth floor of Ashworth 3 was a suitable prospect, as well as the third floor if there was enough monitoring equipment.

Once monitoring was in place engagement activities would be carried out including posters, Be Sustainable online training, walkarounds, CPD courses on sustainable labs, and workshops on specific lab themes, including a session on the Sustainable Campus Fund. Then data on energy consumption per person would be assessed to see if this had led to a reduction. The proposed project still needed to be presented to lab users to get their consent. This would be a 12 month project, the longest undertaken so far, starting in June or July. This should help rule out any fluctuations due to seasonality.

Action – AA to circulate the project plan for Ashworth.

10 HRB Update On Longer Term Impact

SLSG noted a rise in energy use at Hugh Robson over the monitoring period, potentially due to an increase in MSc and undergraduate students and an upturn in the intensity of research. Alternatively, as the per capita figure was based on data from swipe card access, this may have been inaccurate. The Engagement Team would build lessons learned from the HRB project into plans for Ashworth.

Action – AA to circulate the HRB report once finalised.

11 Lab Awards Update

The Lab Awards had taken place at the end of March. Turnout had been good, and the Engagement Manager thanked all involved. Accredited teams included: the Roslin Institute Laboratories; Edinburgh Clinical Research Facility (WTCRF); Biology Teaching Organisation; SRUC Biomarkers Lab; School of Chemistry; IGMM; Chemical Engineering Teaching Lab: Denbigh Lab and the SCRUM Tissue Culture Team. As Awards remain valid for two years, several other teams kept their accreditation from 2017, including: the MRC Centre for Reproductive Health, QMRI; the Horsfall Lab; Chemical and Environmental Engineering; and Bioresearch & Veterinary Services. New teams for 2019/20 included the QMRI flow cytometry facility and the Regan and Wallace groups in biology. Bioresearch & Veterinary Services intended to resubmit this year. More teams were expected to sign up, with the deadline at the end of October.

University-wide, 21 buildings now had Labs Awards teams, some covering the whole building, some just a small segment, with 45% of all lab buildings participating at least partially in the scheme.

12 Any Other Business

Duncan Peter, who had some connections to the School of Engineering, had approached SLSG members in Biology and Chemistry regarding his Scottish Enterprise-funded start-up company focused on producing small, easily installed reverse osmosis units with a wide range of applications, providing point of use purified water. The Convener recommended linking him in through ECCI to the EIT Climate-KIC partnership.