UNIVERSITY OF EDINBURGH **A**

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 **A**

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.

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/m^2 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 **F**

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.