

**MINUTE OF A MEETING** of the Sustainable Laboratories Steering Group held via Blackboard Collaborate on Tuesday 12 May 2020.

- Members:** Dave Gorman, (Convener), Director of Social Responsibility and Sustainability  
Andrew Arnott, SRS Projects Coordinator  
Rachael Barton, SRS Projects Coordinator  
David Brown, Technical Services Manager, School of Chemistry  
Michelle Brown, Deputy Director of Social Responsibility and Sustainability  
Glen Cousquer, Joint Unions Green Rep  
Dean Drobot, Head of Energy and Utilities Management  
Joanne Dunne, Early Stage Researcher  
Grant Ferguson, Director of Estates Operations  
Kate Fitzpatrick, Waste & Recycling Manager  
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  
Chris Litwiniuk, Engagement Manager  
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  
Claudia Schaffner, Technical Services Manager, School of Biological Sciences  
Candice Schmid, Occupational Hygiene and Projects Manager  
Matthew Sharp, BVS Deputy Director - Business
- Apologies:** Joanne Dunne; Grant Ferguson; Yuner Huang; Andy Kordiak; Julia Laidlaw; Brian McTier; Lee Murphy; Claudia Schaffner

**1 Minute**

A

The Convener welcomed attendees to the seventeenth meeting of the Group, and outlined virtual meeting etiquette and objectives for the session.

The minute of the meeting held on 21 January 2020 was approved as a correct record.

*Matters Arising*

Evan Morgan was confirmed as the correct contact for the LILLEE project.

*Actions carried forward*

Action – AK to feed back further information on the dry heat autoclave and large volume steriliser tender.

Action – AA & AK to have a follow up discussion on how best to capture data for a potential target on reuse.

## 2 Covid-19 Impact and Implications for Labs

SLSG discussed the impact of Covid-19 on the University, including health & safety, remote working, and financial implications, in line with the Principal's email of 5<sup>th</sup> May. Given the anticipated budget challenges, there would be additional pressure to prioritise, which would impact the Sustainable Campus Fund and Freezer Fund. This would inform today's discussions.

Change forums around the world were discussing the sustainability paradigm and what a response to Covid-19 might consist of. It would be valuable if UoE discussions could be informed by these imaginative approaches, particularly from the Netherlands and New Zealand, to avoid simply returning to business as usual.

Action – AA to follow up on new sustainability ideas for labs, particularly from Utrecht University.

Action – All to share any emerging best practice ideas they encounter.

The Group acknowledged the context change since the last meeting in January, and while the overall direction of travel should not change, the pace might. It was inspiring that, in the midst of the current crisis, April's University Executive meeting had taken the time to approve a Social and Civic Responsibility Plan for UoE. A recently concluded consultation had shown strong support for the University transitioning to climate conscious travel. Along with the current remote working situation, this had implications for the size and shape of the estate, and for intercampus travel. This whole area was a good example of an intersection between resource, energy, and financial savings, and reduction in carbon emissions.

Action – All members to share any examples of new models of working they see emerging.

## 3 Update on Lab Awards

The Awards were carried out as a practical framework within lab settings. With many labs closed or stripped back, the scheme could not go ahead as normal at this stage. Instead a soft launch was planned in the coming weeks which would provide Awards teams with updated material and resources, with a formal launch to follow once the University fully reopened. Timelines would be adjusted to fit these new circumstances. Instead of a set deadline the scheme would move to rolling submissions, assessing individual teams when they completed the framework. Existing teams that were unable to participate this time could extend their accreditation for an additional year. Members were content with the proposed modifications.

Action – All members to email any further comments to RB.

## 4 Sustainable Labs Programme Plan Update

Members noted this final update on the original 2017-2020 Plan. From the next meeting SLSG would be reporting against the 2020-2025 Plan. This enhanced report included updates against the overall objectives set in 2017.

The 10% reduction in energy consumption was at amber status, as it was not possible to establish with current data if this had been achieved. The success of energy reduction projects needed to be balanced against the increase in floor area and activity/intensity of use. The current expansion of building level metering, especially at KB, should lead to a much stronger position with regard to this kind of reporting through the next financial year.

**B**

Based on figures from Warpit, lab equipment reuse and sharing had increased, particularly over the last 12-18 months.

Reduced consumption of materials was difficult to ascertain with the available data, though there was not felt to be substantial unnecessary waste.

Enabling a culture of sustainable working through provision of support and training for lab technicians had been successful. UoE had signed up to the Technician Commitment, been recognised as an Employer Champion by the Science Council, and had an active and engaged Technician Steering Committee.

Adoption and use of sustainable building design guidelines was also at green status, having morphed into the ESME tool currently in its pilot and development stage.

The stretching target to have 100% of labs covered by Edinburgh Sustainability Awards teams had not been achieved, with teams currently in 54% of lab buildings. A similar target, to have a lab-based energy coordinator in every building with labs, had also not been met.

Members noted that, due to physical distancing requirements, labs would be hugely underused, and would also see extended periods of use, which would need to be factored in when comparing current energy use with other periods.

There had been an intention to host a prestigious video conference during the life of the previous plan. While this had not been achieved, recent developments were shifting significantly in that direction, including the webinar hosted by Andrew Arnott on 23<sup>rd</sup> April.

Extension of the BMS/HVAC control sense checks programme and the cold storage internship both planned for summer 2020 would not now go ahead due to access issues.

Action – All members to share any suggestions for equipment reuse platforms in addition to Warpit.

Action – All members with ideas for possible areas for the Energy & Utilities Team to investigate to send these to DD.

## **5 2020-2025 Plan**

**C**

SLSG approved this final draft of the programme plan for 2020 – 2025, incorporating comments received since the last meeting, noting that timescales and objectives would need to be flexible in the light of Covid-19.

Objective 1, to see good practice behaviours adopted across all labs, would be stretching, comprising targets for 100% of buildings with labs to have at least one Lab Awards team, and a Sustainability Champion, by 2023.

The second objective, to see cost effective lab sustainability improvement projects identified, funded, and implemented, was associated with a target of a 500tCO<sub>2e</sub> annual reduction by 2023 (including ventilation/HVAC improvements). While there may be Covid-related disruption in the short term, members were reasonably confident that this could be achieved.

Objective 3, increasing reuse of lab materials and equipment, was related to actions rather than targets, including increasing awareness and use of Warpit and the external sale/donation process. £1M of funding was currently being sought from Zero Waste Scotland to establish a Circular Economy Hub, which would have a major impact in this area.

The fourth objective, eliminating avoidable lab plastic waste, included targets around developing new recycling/reuse streams for 10 plastic items, and seeing 100% of labs follow best practice in terms of reducing lab plastic waste by 2025. Members noted the UK Government plan to introduce a tax on plastics with less than 30% recycled content.

Action – AA to update the risk management section in the light of Covid-19.

## 6 **Chemical Substitutions**

D

SLSG noted this paper outlining the findings of an investigation into opportunities for hazardous chemical substitution or reduction, focusing on the School of Chemistry teaching and research labs. It considered the embedded carbon in hazardous materials, hazard in use, energy consumption in storage if the materials needed ventilation, and disposal and end of life issues.

The investigation found limited opportunity for improvement to the system currently operating in Chemistry, who were already minimising use and looking for alternatives where possible. There were some recommendations for potential improvements, but these would require significant investment of time and effort to research for relatively little energy and carbon saved.

SLSG noted that UoE did not currently include environmental and social impact on the wider community in its hazardous chemical operational risk assessments (e.g. impact at the extraction or manufacturing stages). These purely focused on hazards at the point of use.

The Group agreed to end the investigation and redirect efforts towards areas with more impactful potential energy and carbon savings.

## 7 **Freezer Fund Update**

E

This paper updated members on financial and carbon performance since the last meeting in January. The fund was performing well, saving around £12K in electricity costs and 37.6tCO<sub>2e</sub> annually. Members recognised the ongoing value of the fund.

Action – AA to look into the discrepancy between the £40K total spend quoted in the paper and the £36K figure held by Estates.

## 8 **Non-recyclable Plastics: Review of Steps Taken by the NHS & Pharma Companies**

F

SLSG noted this paper on the results of investigations into lab plastic waste reduction practices elsewhere. Members agreed that the investigation should continue, with a large workshop planned once restrictions were lifted, bringing together Scottish producers of lab plastic waste, contractors, and umbrella organisations such as EAUC, ZWS, or the Chartered Institute of Waste Management, looking to identify potential economies of scale and more coordinated approaches.

There had been a number of meetings with the NHS and other stakeholders, though these had not yet uncovered new examples of best practice that UoE could adopt. As NHS and waste services colleagues were key workers, these meetings were currently paused.

On UoE's shared sites with the NHS, decontaminated items were not currently acceptable in recycling streams. If UoE were to change this for low-hazard labs it could lead to confusion on these shared sites that would need careful management.

There was potential for UoE to make an impact through procurement by purchasing more recycled plastic items. The Group noted efforts among pharmaceutical companies including AstraZeneca to reduce their lab plastics.

The University of Bristol were currently recycling unsoiled autoclaved plastics from category 2 labs, on a risk assessed lab by lab basis, which was potentially replicable at UoE. The University of Birmingham were shredding plastic bottles for use in 3D printers, and were using a take-back scheme for ice packs from 2BScientific. A lab at the University of York had developed a well-publicised in-house decontamination station and a similar pilot was being run at a lab in Roslin, with work ongoing to look at scalability both within Roslin and beyond.

## 9 Technician Commitment update

Members noted a lot of activity around the Technician Commitment since the last meeting, including the University being [awarded Science Council Employer Champion status](#) at the University Court meeting on 17<sup>th</sup> February. Professional Registration was increasing, 34 technicians having received UoE funding for PR applications and an IGMM technician having achieved RSci. The Technician Commitment was included at the 19<sup>th</sup> February Swan Library launch of the Edinburgh Manager Programme. The Technicians [career development programme](#) was continuing, including Andrew Arnott's 23<sup>rd</sup> April career insights lab sustainability webinar. The CMVM Core Facilities Fair Attribution Policy recognised the contributions of technical staff. The Technician Steering Committee provided [weekly Covid-19 newsletters](#) for UoE technical staff and their managers. Full details were available on the [technicians website](#).

Members welcomed progress to date, particularly the very active and coordinated community of technicians, and thanked Val Gordon for her efforts.

Action – JR to circulate the update from VG after the meeting.

***Post-meeting note: update circulated via email on 12<sup>th</sup> May.***

Action – All members wanting further information to get in touch with Val Gordon.

## 10 Any Other Business

- [Social Responsibility and Sustainability Report 2018-19](#)  
SLSG noted the latest report, which dovetails with the Annual Report & Accounts.
- *HEaTED Online Training Course*  
The Group noted this talk from Martin Farley of UCL on sustainable labs and Covid-19, which would take place on Tuesday 19<sup>th</sup> May from 10am until noon.