

Sustainable Science Committee ToR

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1. Background

Scientific research can require immense investments of energy, consumables, and human resources. A typical laboratory will consume 3-10 times more energy than the same non-laboratory spaces, while 1.8% of global plastic waste was estimated to have originated from laboratory settings. Many of our scientists require air travel, resulting in 122 times more emissions than land-based travel. With a growing urgency to mitigate our environmental impacts and improve efficiency, scientific research represents an opportunity for incorporating sustainability into operational practices.

King's College London has committed to achieve net-zero carbon emissions by 2025 (<https://www.kcl.ac.uk/news/zero-carbon-by-2025>). Its laboratories consume nearly two thirds of the energy on campus, and are responsible for a comparable portion of total carbon emissions (when including scope 3 emissions, typically associated with all the college procures). Successful laboratories also rely on a broad set of stakeholders managing support systems, for e.g. equipment sharing systems, or LIMs. These many stakeholders and support systems have significant impacts on overall research efficiency, and historically have been managed in a devolved manner at best. This lack of coordination has resulted in lost opportunities for savings, wastage, and unnecessary negative environmental impacts.

In 2020, King's College's Health Faculties Executive Committee approved a paper submitted for review, which detailed the creation of a Sustainable Science Committee.

2. Committee Purpose

The purpose of this committee is to provide a forum for the review and approval of the various support systems science facilities require, with a focus on efficiency and environmental sustainability. These support systems include but are not limited to: Procurement, environmental sustainability, lab related transport, lab waste management, LIMS, freezer storage, equipment management (including sharing & monitoring), chemical management, staff training requirements, and research quality which relates to operational matters (e.g. sample integrity and HTA compliance through robust cold storage management).

3. Objectives

The committee would have 8 stated objectives, though these may be reviewed by committee members in the future:

1. Drive uptake of the Sustainable Laboratory programme (LEAF) for all relevant laboratories

2. Integration of sustainability objectives into job descriptions, both for technical and academic staff
3. Development of a college-wide strategy for cold storage sample management & associated equipment requirements to support research integrity and HTA compliance
4. Development of a college-wide strategy for chemical and equipment management
5. Support E&F projects & waste management strategies and projects where relevant to laboratories
6. Develop specifications and/or guidelines for college-wide tenders of laboratory equipment or services to reduce carbon emissions
7. Support the research community as funders establish environmental sustainability targets
8. Review and support sustainability initiatives/projects which may incur financial spend, for potential submission to CAP/RERC (or the appropriate body)

4. Term & Upkeep

This committee will meet every 6-8 weeks. Objectives would be reviewed and updated on an annual basis.

5. Reporting Structure

The Sustainable Science Committee will report on a quarterly basis to the Finance and Investment Committee. Documentation will be prepared by the Committee's secretary.

6. Membership

The Research Management and Innovation Directorate (RMID) will be responsible for the upkeep and management of the committee. Below is a proposed initial membership:

Name	Role
Martin Kirk (Chair)	Director – RMID
Martin Farley (Secretary)	Sustainable Research Manager - RMID
Greg Anderson	Head of Technical Platforms - RMID
Stephen Shemilt	Head of Technical Services - FoLSM & IoPPN
Julie Allen	Energy Manager – E&F
Brendan Cahill	Capital Projects – E&F
TBC	Health and Safety
Darran Whatley	Assistant Director - Science Procurement
Cheryl Gillet	Head of Tissue Banking for the Health Schools
Abigail Tucker	Dean for Research, Faculty of Dentistry, Oral & Craniofacial Sciences
Juan Martin-Serrano	Vice Dean (Research and Impact) FoLSM
Paola Dazzan	IoPPN Vice Dean (International)
Kat Thorne	Director of Sustainability
TBC	Student Representative

Oliver Austen	Technical Representative
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