

SUSTAINABILITY CHAMPIONS STORIES 2020–21

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Introduction

Sustainability Champions (also nationally known as Green Impact) is a behaviour change programme at King's.

Sustainability Champions work across all areas of King's, from faculty offices to academic teaching spaces, Estates & Faciltities, research and teaching labs and halls of residences.

The Sustainability Champions work hard to make King's a more sustainable working environment; reducing the negative and maximising the positive social and environmental impacts. The programme has proven to be crucial in helping the King's Sustainability Team embed sustainability and efficiency throughout the university. It also brings together King's staff and students from the different campuses, departments and faculties, empowering them to make positive changes within and beyond their own work environments.

This Sustainability Champions Stories PDF seeks to give some examples of some of the brilliant work individual Champions and teams have done over the past academic year. We hope this compilation of case studies can inspire and motivate more sustainability work, as well as promote the work of some of the brilliant people involved in the Sustainability Champions programme.

Chantler Sall Centre

Life Sciences & Medicine

At the Chantler SalL Centre it was important for us to become sustainability champions as we have seen the impact of sustainability issues on our planet and wanted to do our bit as people and as part of the King's College London Strategic Vision 2029.

The Chantler Sall Centre is a combination of offices, simulated ward spaces and clinical classrooms. We wanted to have a sustainable impact on all aspects of our department with a particular focus on well-being during the COVID pandemic.

We reduced the amount of recyclable waste going into clinical waste which has allowed us to reduce our carbon footprint, as less CO2 is being produced from incinerating items that are recyclable. We did this by introducing recycling bins in every classroom and floor.

We have really focused on communication this year within the Sustainability Team and the wider department, especially during COVID when many people have felt disconnected. We have been informing the department of what we are working on, how to get involved and providing resources through a Sustainability Newsletter which highlights important issues that surround sustainability e.g. Fairtrade fortnight and accessible links to resources on well-being.

We are proud to be working with the Widening Participation team to create a workshop to deliver a rich learning experience in summer 2022 for students from underrepresented groups.

Being a part of the Sustainability Team has allowed us to not just implement sustainable practices at work, but also at home such as growing our own vegetables and composting food waste generated within the home.









The Chantler SalL Centre is very involved with supporting their staff in achieving their sustainability and well-being goals.

King's student auditor, Chantler SalL Centre

It was amazing seeing the innovation within the team when it came to approaching the different goals.

It was clear that the team was taking this seriously through the way in which they overcame different boundaries regarding achieving goals.

King's student auditor, CIBCI

Entrepreneurship Institute

King's 20 Sustainability Clinic

The King's 20 Sustainability Clinic is a core, mandatory bootcamp which aims to introduce ventures to the basics of running a business. By integrating sustainability within this programme, ventures can integrate sustainability into their business plan from the very beginning. It also allows ventures to understand the importance of sustainability. Part of this was done through a discussion panel which hosted four ventures that have sustainability as a key aspect of their business, allowing them to share their passion, experience and hopes for making the world more sustainable in the future. King's Entrepreneurship Institute also used their in-residence investors to share their perspectives on the importance of sustainability and the impact of businesses.

The King's 20 Sustainability Clinic also integrated the Sustainable Development Goals within its framework, allowing ventures to identify different goals which ventures want to align with. This has been widely successful, with new ventures such as City Grocer – a delivery service which specialises in Asian groceries – having identified different ways to use sustainable packaging to keep their food within its required temperature. They are now in discussion with Pluumo – a sustainable thermal packaging company.

The King's 20 Sustainability Clinic is focusing on putting sustainability at its core, allowing for sustainable ventures to flourish for years to come. One way in which the clinic is doing this is through adding in a question for this year's applicants on which sustainable development goals each venture would focus on.





The Guy's Operations Team is very passionate about achieving sustainability goals.

They focused on the perfect blend of goals supporting the environment, racial equality, a diverse workplace, and many others.

King's student auditor, Guy's Estates and Facilities

The team has championed effective initiatives supporting students and staff in extraordinary times.

They were particularly successful in promoting well-being support and adapting online resources to increase accessibility.

King's student auditor, School of Global Affairs

Lavington Street

Estates & Facilities

Sustainability Champions

This year brought new challenges to creating our Gold Action Plan as we were not able to start or finish a lot of ideas from our previous Gold Action Plan. However, our momentum and drive for positive change remained unscathed. With the majority of our teams working from home and not returning to the office often, we had to rethink how we could still make an impact on those who are normally based in our office but are now working elsewhere.

Our monthly virtual meetings were a space to share resources, brainstorm ideas, question current practices and talk about any and all things sustainability. We shared how different the waste contracts and recycling specifications are across our local councils and what we could do to fix that. We talked about the sustainability switches we had recently made, how only a handful of councils collect curb side food waste and what our sustainability action plans were going to be once we returned to working in the office again.

Along with planning an exciting and impactful Gold Action Plan, this group created a strong sense of community which brought us together in a time when we needed it most, given what is going on across the globe. Everyone in this group is so dedicated and passionate about sustainability that we always leave our meetings feeling energised and ready to take on the world!





When posed the question, why are you a Sustainability Champion to the Estates and Facilities team, they offered the following reasons:

I became a Champion because I am enthusiastic about the environment and I want to support others to become more sustainable any way that I can.

Angeliki Karydi, Energy Management Coordinator

I became a Champion as I was excited to support a team of like-minded colleagues working to ensure King's is a sustainable place to work and study.

Jeff Bray, Project Manager

I'm a Champion because I hate waste - of any description!

Julie Allen, Energy Manager

I became a Champion because I wanted to do my part to make a positive impact and difference both at King's and beyond.

Megan Whittaker, Business Support Manager

Being a Champion provides me with an opportunity to engage with like-minded people to talk about sustainability at work and at home.

Negar Khoshooee, Project Manager

I am a Champion because I want to be a positive influence and force in my workplace for creating a better future.

Ruadhan Jenkins, Fit for King's Administrator

I like being a Champion as I feel it gives me a greater understanding scientifically but also provides solutions on how individuals can make an impact.

Sarah McLean, Assurance Support Manger

Innovation Hub

Life Sciences & Medicine

Initiatives

- 1. We installed automatic lights in the seminar rooms and office area. Previously lights were often left on overnight, sometimes even found on over the weekend. The lights now go off after 15 minutes without movement, saving hours of electricity across about half of the overall workplace area.
- 2. We coordinated Pipette Servicing with Research Oncology in Bermondsey Wing, as well as -80 servicing, plate reader and incubator servicing, and joint servicing and fumigation of the saftey cabinets and fume hoods. This saves time and money when calibrating pipettes and ensures the minimal number of call-outs.
- 3. We created a common consumables purchasing list across the Innovation Hub communal items purchased by different groups were then shared across the lab. This is regularly reassessed by floor operational meetings; items need to be used by at least three groups to go on the list and stocks are checked and maintained in a collective manner. This prevents repeat ordering of equipment or reagents and ensures minimal numbers of deliveries, I and keeps costs efficient as we buy in bulk.
- 4. We have a joint dishwasher service contract with a few other departments. This means we get a better deal on servicing and it is easier to limit call-out numbers.
- 5. We have booking systems in place across much of our equipment, which are shared across the hub. This includes slide scanners and microtomes that are used by staff outside of the hub. This makes sure equipment is used effectively and not wasted and prevents repeat purchasing of the same equipment across multiple labs.





Great Dover Street Apartments

King's Residences, Estates & Facilities

Garden Patch

The garden patch at Great Dover Street Apartments (GDSA) was set-up by Joanna Wierzbinska, a Sustainability Champion with a passion for gardening. Joanna saw potential in an used space in the GDSA courtyard and wanted to utilise the area by creating an opportunity for residents to get involved with a garden and enhance the biodiversity of the space.

The garden was set up in Spring 2021 and the garden is currently being brought into the Sustainable Living Communities (SLC) programme, which offers students in King's Residences the ability to shape the sustainability of their halls and aims to create a community of students engaged in learning more about sustainability and engaging in sustainability-related activities.

GDSA Residence Manager, Madeleine Jammeh, said:

"The garden is an oasis of not just much needed plant growth, but an oasis of hope and a symbol for the future.

We had an overwhelming response to that project and suggestions received from the students at GDSA. The idea of the garden patch came at the time when as an institution we were faced with adversity. This was much needed in bringing our community together."





Garden Patch at GDSA

Before



1. Joanna and other Sustainability Champions prepping the area.



2. Joanna planting seeds



3. A series of plant pots and plantable containers.

After



4. The garden patch as of 2021.



5. Plants in the patch (1)





6. Plants in the patch (2)

Department of Geography

Social Science & Public Policy

Sustainability Education

Following the development of the 'Sustainability in Practice' module last year, it was launched this September to third year undergraduates and postgraduate students, led by Emma Tebbs and Helen Adams.

The module uses problem-based learning to get students to address challenges around sustainability at King's, as well as encouraging them to reflect on sustainability as a concept and broader global sustainability issues. The students interacted with the Sustainability Team among other King's entities and partners on sustainability themed projects. Example projects included promoting low-carbon transport methods, exploring the possibility of switching a combined heat and power plant to hydrogen, and doing habitat surveys of King's Sports grounds to evaluate the possibility of enhancing wildlife on campus. Students presented their project findings to the hosts, and developed a report outlining their proposed solution.

Student feedback on the module has been positive, with students agreeing particularly that the module helped develop their understanding and reflection on practical solutions for sustainability, knowledge of sustainability and the UN SDGs, critical perspectives on sustainability, and more practical skills like teamwork and interdisciplinary working.

The module has also been used by the Sustainability Team as evidence of the success of Education for Sustainability, and has formed part of a wider pitch to senior stakeholders aimed at increasing the amount of sustainability and climate education students receive while at King's. One of the students sitting the module has since been hired by the Sustainability Team to aid on the King's Climate Action Network work, highlighting the immediacy of transferable skills offered by the module for those aiming to work in Sustainability.

The department and the Sustainability Champions show strong awareness of sustainability issues.

Engagement activities and practical efforts to advance sustainability goals were very successful.

King's student auditor, Department of Geography

GDSA has a very involved team that clearly cares for their students. There is a strong sense of awareness for sustainability as well as inclusion.

King's student auditor, GDSA

King's Sport

A Year of Move Your Mind

To support the community during the first lockdown, King's Sport developed the Move Your Mind (MYM) programme, a free online physical activity programme open to the King's & wider community.

We launched with 50 classes a week, which proved to be highly successful. During the first lockdown we hosted over 550 activities and we had 30,320 attendances and over 3,000 unique users.

"Great work, you responded very quickly to this difficult situation and are helping a lot of people through this difficult time with much needed exercise. Please pass my thanks to all of the instructors."

- MYM participant

During this period, we also gave users the option to donate their well-earned King's Move points to the NHS & hosted a virtual run to raise funds. In doing so, our users donated over £3200 to our NHS partners.

"Firstly thank you for providing such an amazing service. I would like to see more meditation and mindfulness sessions. I think people who are having to stay at home, or even our colleagues who are still out there working (so hard), need to do something to still their minds. I know I appreciate this."

- MYM participant

Due to the success of MYM we have embedded it in our core delivery so that the King's community can continue to partake in well-being and physical activity sessions from home.

Their participation has allowed greater development for other areas of their department such as increased diversity and well-being initiatives.

King's student auditor, Dean's Office

The King's Sport team is very passionate about achieving sustainability goals and is trying their best to incorporate those goals within the activities of their department.

King's student auditor, King's Sport

Strand Operations

Estates & Facilities

This year for Strand E&F Sustainability Champions team has been both challenging and exciting. Despite our team shrinking due to unforeseen circumstances, our team consists of colleagues from the Facilities Assistants team, Security, Logistics, Manager on Duty team and Campus Projects.

Examples of some of our projects:

- 1. Procurement of an eco-friendly umbrella dryer (currently in Bush House South East reception) with a hands-on demo for colleagues.
- 2. Publishing printer statistics near office printers in the Strand Campus Operations office to reduce, reuse and recycle as much as possible.
- 3. Delivering toolbox talks on sustainability to both our immediate teams and some wider teams.
 - 4. Project managing installation of solar panels in Bush House ongoing.
 - 5. Started sharing sustainability facts amongst our teams via email.
- 6. Volunteering our time at local community gardens and centres, most notably with Step Out and By My Eyes.
- 7. Applying for funding to replace all hand towels at Strand with energy-efficient hand dryers.
- 8. Creating a business case to provide the Strand community with bike racks for foldable Brompton bikes.











Image below: (L-R) Daniela (above), Eve (above), Jessica (below), Edwar (below) and Kautuk (corner).



Laboratory Sustainability Initiatives: 5th Floor Guy's Tower

Life Sciences & Medicine

Initiatives

- 1. Ice packs can now be recycled by dropping them off at collection points on the floor, from where they are periodically transferred to a central collection point and from there recycled back to the company. Ice packs make up a significant amount of waste (kilos/week) and would otherwise often be disposed of as clinical (yellow bag) waste. We expect a significant reduction in waste disposal if the scheme can be continued.
- 2. We have introduced a drop-off point for dry ice in the hope that we can store dry ice that arrives with deliveries and hopefully make it available for reuse, either for subsequent deliveries or for research purposes. This will hopefully result in a reduction in the need to seek out and consume "fresh" dry ice leading to a reduction in usage.
- 3. We have implemented a glass bottle recycling point, hopefully allowing labs to drop off bottles suitable for recycling that can be transferred to a central collection point in New Hunt's House stores. This allows recycling of suitable glass bottles and prevents buildup of glass waste on the floor, with no clear disposal route.
- 4. We have placed signage in an attempt to encourage people to use a small desktop autoclave for small items (surgical tools etc.) rather than running the large autoclaves. Use of small autoclave provides a significant saving on energy compared to running the large units when almost empty.
- 5. We have adjusted freezers to ULT freezers with a further 10 to follow assuming agreement. We predict significant energy savings if an agreement is reached.





Images below: (L-R) Glass cleared, plastic cleared, dry ice storage, glass cleared (below), glass recycling point (below).











Sustainability Champions Spotlight: Dr Glyn Jones

Dickson Poon School of Law

Since joining the programme, I have worked with members of our Law Sustainability Working Group in raising the profile of Sustainability in the Law School. We set up a new Sustainability email address – law-sustainability@kcl.ac.uk – to invite staff ideas and feedback on sustainability initiatives and projects in law. We then relaunched our Law Sustainability Working Group over the summer of 2020 and have since grown to 10 members, including our two student Sustainability

Assistants. We then set up our Sustainability Newsletter for Law which goes out to all staff in the school and has a theme every month. In December 2020, for example, we did a 12 Sustainable Days of Christmas and in March 2021 we did a Service/Volunteering takeover to encourage staff to get involved and use their three allocated Service Days.

We have also sought to raise the profile of Sustainability through placing updates and agenda items at our various Faculty committees. At our Students Culture and Community Committee (SC3 Committee), sustainability is a standing item on the Committee's agenda. I also presented a Sustainability Update paper at our Law Faculty meeting in March, 2021.



Inspired by King's provision of up to three Service Days per year and by my colleague Kate Southard, I have used my Service Days during lockdown to support a local community project in my home town of Alton, North Hampshire. The project is run by Alton Climate Action and Network (ACAN) and falls under its Local Action for Nature whereby public spaces are rewilded and planted with native plants and flowers. My role has involved me in preparing the ground for planting trees & plants and making a composter. Going forward, I have a longer term responsibility for tidying and maintaining the site, including watering.







Student Mobility and Success

Students and Education Directorate

The Social Mobility and Student Success division supports underrepresented students to access university and to succeed whilst they are at King's. The nature of our work means that thinking about race and ethnicity is intrinsic to what we do. However, following the murder of George Floyd last year many staff members within SMSS began to question whether there was more we could do to be more actively anti-racist. Based on this, we brought the department together for a Conversations About Race session which offered an opportunity for the department to engage in an honest and open conversation about race, racism, and privilege. Areas addressed are:

Language we use around race and ethnicity

The group felt there was a lack of clarity around what language we should be using in different contexts. We wanted to equip staff with the knowledge and confidence to speak openly about race. A sub-group was formed to create a SMSS Anti-Racism Glossary – this provides definitions and contextual guidance for the use of a range of terms related to race and ethnicity.

2. Recruitment and representation

As a division, we want to be more representative of the communities we work with. So far, the group has worked to create more inclusive job descriptions and has developed guidance for our selection and interview processes. This aims to remove potential unconscious bias to recruitment of staff from minority communities.

3. Education and training

We continue to engage with education and training to develop our knowledge and practice around race. The chair of each meeting chooses a race related reading which we discuss as a group. Continued training for the whole division is a key area for our Race Equity Plan.

Our hopes for the group moving forward are for it to play a key role in supporting our division's Race Equality Action Plan and improve recruitment practices to ensure that we represent all the communities we work with. We will continue to strive to create a welcoming environment for BME staff and students at King's

3 GOOD HEALTH AND STRONG
4 QUALITY DI REDUCED MEDIDATION
10 PEACE, JUSTICE MEDIDATION
11 PEACE, JUSTICE MEDIDATION

The team shows continued dedication and enthusiasm in implementing sustainability practices.

This has resulted in synergies and collaborative efforts, even outside the Sustainability Champions Team.

King's student auditor, Social Mobility and Student Success Division

The team has covered a great achievement with the initiatives and involvement championing the respective sustainability efforts in their department.

King's student auditor, IoPPN Bee Team

Wolfson Centre for Age Related Diseases

Institute of Psychiatry, Psychology & Neuroscience Initiatives

- 1. It was the cheapest option when two ULTs broke down to repair them rather than buy new ones. One ULT is under a service contract so the repair was covered. The other was not under a contract but has been repaired rather than replaced.
- 2. Two microtomes were put back into commission from storage so that more people could get their work done. This prevented the purchase of new microtomes for the department.
- 3. We reclaimed centrifuges and nanodrop sledgemicrotome. A lab in another building had shut down and the equipment was no longer in use. The equipment was recommisioned and relocated. This prevented unused equipment from being thrown out or new equipment being purchased.
- 4. We held a recycling competition in the department. We raised awareness of what could be recycled and encouraged everyone to recycle more. It was good for team building.
- 5. We started some indoor planting reusing discarded tip boxes. This prevented tip boxes entering landfill, by utilising the big south-facing windows which get lots of sunshine.
- 6. We implemented water-saving aerators to the toilet taps. The toilet taps have high ouput with low pressure and we want to reduce the ouput/min and have higher water pressure so that we can ensure proper handwashing without too much water waste. We found the correct aerator size for the taps, but the trial aerator we implemented only marginally reduced water ouput. We are still on the hunt for aerators that can output less than 8L/min.
- 7. We have been collecting and breaking down used pallets in and around the Wolfson Centre to make garden and window planters, along with pallet furniture. We reduced the number of pallets scattered around the building and prevented the purchase of lumber for our window planter project.
- 8. We have a monthly sustainability newsletter in our building. We share pratical tips to be more sustainable in the lab and life in general. We also have a vegan/vegetarian recipe section and we encourage people to share their recipes.

Department of Geography Laboratories

Social Science & Public Policy

Our work on pollution monitoring of the Strand-Aldwych is part of a larger research project ReSET (Restarting Economy in Support of Environment, through Technology) supported by the European Innovation Council under Horizon2020 (EIC Pathfinder).

The Strand-Aldwych area is a polluted, traffic dominated gyratory (typical of the gyratory systems of the 1960s) that is also home to world-leading cultural centres (Somerset House) and universities (King's College London, London School of Economics). The Strand-Aldwych project aims to transform this to a pedestrian-focused destination with strong links to the surrounding districts as a global creative and cultural quarter. The main proposal is to change the north side of Aldwych gyratory system into a two-way road, and remove all motor traffic from its south side (Strand). This would reconnect the north and south side of the Strand, east of Waterloo Bridge, generating a completely new environment in one of London's most polluted spots. Occupying property on both the north and south side of the proposed pedestrianised road, King's is a major stakeholder in the scheme.

The Strand-Aldwych pedestrianisation is an opportunity to understand the net impact of pedestrianisation schemes on urban traffic flows and resulting noise and air pollution. Our aim is to understand how the scheme affects pollution on the Strand but also on the Aldwych and adjacent roads. We have deployed probably the densest noise and air pollution monitoring network anywhere in the world (22 stations in 3.5 hectares across the King's roofs, Strand, Aldwych, Kingsway and surrounding streets), which are all designed and built in-house and record levels of noise and air pollution every 10 minutes.

ReSET is a three year project ending January 2024. We will maintain the equipment for most of that period to understand how pollution is affected by different traffic and meteorological conditions.









Below images: 2 of the 22 stations designed and built in-house, recording levels of noise and air pollution every 10 minutes.





Great enthusiasm and elaborate initiatives for sustainability.

One of the most passionate departments I came across in terms of sustainability, which I highly appreciate.

King's student auditor, King's Business School

Many effective initiatives were championed by the team this year, such as identifying SDGs to focus on and enhance in core activities.

Credits to the team for their continued efforts in ensuring a greener workspace, even when working from home.

King's student auditor, Dickson Poon School of Law

Sexual and Reproductive Health Education Outreach

Opeoluwa Olusoga: Women and Children's Health

I was researching the new compulsory Relationship and Sex Education (RSE) curriculum and saw that there was still a big censorship on the topic. Young people are still being deprived of vital information needed during development. We can see the impact of this with one example being the rising cases of STI rates within the young population. This then prompted me to reflect on my own RSE lessons in school and how it only focused on cisheterosexual relationships and sex.

I decided to put together an outreach project. The project is designed to provide young people with more useful, relevant, and engaging information and resources around sexual and reproductive health. Working in collaboration with Hertility Health, we are planning to produce and deliver workshop materials including presentations, activities, and information sheets to young people to get them engaged in a very important discussion about their sexual and reproductive health. I endeavour to pilot this outreach with community trust charities that regularly deliver youth programmes and workshops.

My aim is to create a conversation around sexual and reproductive health with the younger generation that will inspire them to begin their own research and ask the questions they once would have felt too awkward or embarrassed to ask.

To have a more informed and self-aware generation, we need to change the narrative and remove the stigma around teaching young people about their own health and bodies. I believe that starting this conversation on youth programmes where young people feel safe and included is the best place to do so and can really change lives.







Nutrition & Multi-Disciplinary Laboratories

Life Sciences & Medicine

In Nutrition research and practical classes, we measure minerals including Calcium, Iron and Zinc in food samples using an ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometer). The standard digestion method uses a lot of acid.

The organic matrix is normally destroyed by microwave digestion, using 70% Nitric Acid in pressure vessels. Then the samples are diluted to a standard volume. (Lab classes use 100ml glass volumetric flasks; researchers prefer smaller plastic tubes.)

However, if the element of interest is fully dissolved and it can easily be separated from any residue, there is no need to completely digest and dissolve the entire sample. Some foods contain a lot of fat. Fat is hard to digest in acid and it can block the nebulizer of the ICP-OES, so I digested food samples in different concentrations of Nitric Acid to see how much acid would be needed to give a clear digest without any fat floating on the surface.

I tested Digestive biscuits because they have the highest saturated fat content of the foods that we routinely measure. After digestion and dilution, I centrifuged the samples and measured them on our ICP-OES to see whether reducing the acid would affect the results. When the acid concentration was reduced to 10%, droplets of fat collected in the neck of the volumetric flask. These were hard to avoid, and they could block the ICP-OES nebulizer.

However, 40% acid gave a useable digest and had no adverse effect on the measurements. For research focusing on lower-fat food samples, we can reduce the acid concentration to 30%.

Our overall acid use has been halved, which also means we produce less acid waste. This benefits King's also by saving money.





SUSTAINABLE GALS DEVELOPMENT GALS





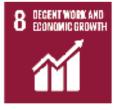
































Thank you to everyone who took part in the Sustainability Champions (2020/21) programme!

Want to join the programme? Email us: sustainability@kcl.ac.uk