

ENVIRONMENTAL SUSTAINABILITY REPORT 2022–23





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Front page:

The graphics on the front of this document and represented on each page are 'warming stripes' for the globe from 1850–2021. These are visual representations of the change in temperature, as measured in each country over the past 100+ years, and each stripe represents the temperature in that region averaged over a year. For virtually every country or region, the stripes turn from mainly blue to mainly red in more recent years, illustrating the rise in average temperatures in that country. The graphics are used under Creative Commons Attribution 4.0 License. The Licensor and creator of the graphic is Professor Ed Hawkins (University of Reading). See [#ShowYourStripes](https://www.showyourstripes.com) website for more information.



1. UN Sustainable Development Goals

King's College London seeks to play a central and transformational role in advancing the **United Nations Sustainable Development Goals (UN SDGs)** by 2030 through our education, research and service to society. Approved by the member states of the United Nations (UN) in 2015, the SDGs are a set of 17 goals designed to address our most critical global challenges. King's **2020–21 SDG report** showcases our contribution and response to the goals. Throughout this document, we have highlighted the relevant SDGs to illustrate how our work relates to each one.

SUSTAINABLE DEVELOPMENT GOALS





2. Introduction

Sustainability is one of the enabling foundations of King's Vision 2029, which builds upon our history of making a significant contribution to society and takes us to our 200th anniversary in 2029. In 2022–23, we continued to make substantial progress in achieving our environmental sustainability ambitions.

To chart the next stage of our journey towards our 200th anniversary, King's Strategy 2026 maps our priorities for the years ahead. This includes a commitment to a step change in our approach to sustainability and climate change, providing almost £6 million of King's core funds to become a leader in education and research for a just transition to net zero and to build sustainability into all our actions.

Professor Frans Berkhout was appointed as Assistant Principal (King's Climate & Sustainability) in February 2023 to lead this cross-university drive to rapidly scale King's response to the climate emergency. In the same month, **King's Climate & Sustainability Action Plan**, developed by the university's Climate & Sustainability team in consultation with students, staff, alumni and members of King's Climate Action Network (King's CAN), was published. The action plan outlines 13 key impact areas to guide the university's approach to sustainability and climate change, informed by the UN SDGs.

This all took place during our annual **Climate & Sustainability Month**, where King's welcomed more than 800 students, staff and alumni to 39 social and educational events. Across 2022–23, we organised 194 hours of events on topics from indigenous rights to seed bomb making workshops, reaching 2,178 people.

The **King's Climate Action Network** grew to 433 members, with one-quarter volunteering to support projects on energy, cycling, schools engagement, supply chains, community listening and education. The **Sustainability Champions programme**, which empowers our community to make positive and sustainable changes to their work environments, now includes 366 staff members and 62 teams, with 39 teams receiving Gold, Silver, Bronze or Foundation Awards in 2022–23.

We also continued to improve the sustainability of our operations, reducing our scope 1, 2 and 3 carbon emissions. Our Heat Decarbonisation Plan sets out how we will reduce emissions from heating our buildings over the next 20 years, and we are rolling out key projects to deliver on these ambitions. The Directorate of Estates & Facilities created a 'Strategy and Action Plan for Embedding Sustainability in Capital Projects' and are on track to achieve a BREEAM rating of 'Excellent' for two buildings. Our waste production and water usage are continuing to decrease, and we have implemented biodiversity projects across our campuses. We continued to encourage more active travel by organising a cycling tour, and we supported sustainable business travel by developing a sustainable travel guide and engaging with our travel providers.

In July 2022, King's was recertified as a Fairtrade University, achieving two stars in the student-led audit. King's Food was also awarded three stars by the Sustainability Restaurant Association (SRA) through the Food Made Good report.

Following divestment from fossil fuels, the Finance Team met the target to invest 40 per cent of its funds in investments with a positive purpose two years early. The Procurement Team has continued to improve supply chain sustainability through new contracts, tools and partnerships.

Leveraging the core of our work on education and research, our 2022 SDG curriculum mapping showed how academics are already driving Education for Sustainability through innovative modules across faculties. The co-created, open access, **online (KEATS) module on Sustainability & Climate** saw 997 students and staff enrol in its second year running, with 281 successfully completing it.



King's committed to a major step up in its research on climate and sustainability, providing new funds to help connect and scale research across all faculties over the next three years. In 2022–23, new centres and networks were established, and a brand-new King's Climate & Sustainability Seed Fund was launched, accompanied by a series of networking events bringing together students and staff working in the climate and sustainability field to share knowledge and foster connections.

Finally, we continued to collaborate on sustainability topics with our local communities and the wider sector. This includes our partnership with Citizens UK, our involvement

in the Alliance for Sustainability Leadership in Education (EAUC) and the London Student Sustainability Conference, and our role as one of the first organisations in the Lambeth Climate Partnership Group.

This report summarises the efforts made by the entire King's community to make the university more sustainable: from managing our estates and providing sustainable food to engaging with our local communities and driving Education for Sustainability. We hope it inspires you to take action on climate and sustainability, whatever your role within or beyond King's.





Target achieved/on track ●
 Progress towards target ●
 Target not achieved ●

3. 2022–23 sustainability targets

Environmental management	Maintain an Environmental Management System (EMS) to the standard of ISO 14001:2015	●
	Achieve a reportable environmental pollution incident rate of zero	●
Water	Reduce consumption of water by 2 per cent each year from 2013–14 (cubic metres per total FTE – staff and students)	●
Waste and resources	Achieve 73 per cent recycling by weight of total non-hazardous office and residential waste in 2022–23, and 75 per cent in 2023–24	●
	Reduce total annual operational waste produced by the university (excluding construction) by 35 per cent from 2017–18 to 2022–23, and 30 per cent by 2023–24	●
Carbon and energy	Achieve net zero carbon emissions by 2025	●
	Reduce energy emissions by at least 50 per cent by 2025, from a 2018–19 baseline	●
Food	Maintain a Sustainable Restaurant Association (SRA) rating of three stars for King's Food	●
Supply chain	Develop a Fairtrade Action Plan 2022–24 to maintain Fairtrade University award	●
	Reduce supply chain emissions by 25 per cent by 2025, from a 2018–19 baseline	●
	Increase number of social enterprises and not-for-profits in our supply chain	●
	Implement supplier assurance tool to audit our supply chain	●
	Audit our major electronics suppliers via our partnership with Electronics Watch	●
	Increase awareness of the Socially Responsible Procurement Policy internally and externally	●
Partnership and community engagement	Engage with at least one local community project that promotes and improves the environment	●
	Take an active role in sector sustainability networks such as LUEG, LEAN and EAUC	●
	Engage with local councils on climate and net zero strategies	●
Clean air, travel and transport	Implement at least two clean air initiatives recommended by Business Low Emission Neighbourhoods	●
	At least 75 per cent of King's directly controlled fleet to be zero/low emission vehicles (excluding sports ground off-road vehicles and King's Food static food/drink vehicles)	●
	Increase number of bicycle parking spaces across the estate	●
	Reduce business travel emissions by 60 per cent by 2025, from a 2018–19 baseline	●
	Set baseline for student end-of-term travel	●
Construction and refurbishment	BREEAM assessments carried out on all new buildings/major refurbishments as required by planning <ul style="list-style-type: none"> • New builds to achieve minimum 'Excellent' • Major refurbishments to achieve 'Very good' 	●
	All large-scale fit-out projects to apply King's Sustainability Guidance (Capital Projects Brief) and Checklist, or complete SKA assessment	●
Biodiversity	Implement at least 75 per cent of the agreed 2022–23 opportunities identified in the Biodiversity Action Plan	●
Sustainability engagement	Minimum 90 per cent of eligible Estates & Facilities (E&F) staff to complete Fit for King's sustainability module within 12 months of induction	●
	Achieve at least 600 hours of student engagement opportunities	●
	Achieve minimum of 60 Staff Sustainability Champion teams completing Bronze, Silver or Gold level (including LEAF)	●
	Enrolling 250 students in the Sustainability KEATS module, with at least 150 students completing the module	●



4. 2022–23 sustainability highlights





5. Environmental management

Targets

- Maintain an Environmental Management System (EMS) to the standard of ISO 14001:2015 ●
- Achieve a reportable environmental pollution incident rate of zero ●

Policy

Sustainability at King's is governed through our **Environmental Sustainability Policy**. It applies to all areas and activities of the university and sets out our key environmental commitments, including setting and reviewing targets and providing student and staff engagement opportunities. The Climate & Sustainability Action Plan was published in 2023 to deliver on these targets.

Progress

Our EMS ensures that our campuses are operated in an environmentally sustainable way, with continual improvement at the core. It covers all areas of Estates & Facilities (E&F), which spans our campus operations, King's Food, King's Residences and capital projects, as well as cleaning and security teams. Training and regular internal audits ensure that policies and procedures are followed and that all staff within E&F can carry out their roles with sustainability in mind.

In March 2023, the EMS was recertified to the ISO 14001:2015 standard following an external audit. With continual improvement being a key component of the EMS, we always seek to develop new initiatives to meet our sustainability objectives. The remainder of this report shares some of our key successes and developments, as well as our challenges, in 2022–23.





6. Water

Targets

- Reduce consumption of water by 2 per cent each year from 2013–14 (cubic metres per total FTE – staff and students) ●

Policy

Through our Environmental Sustainability Policy, we are committed to increasing water efficiency across our estate through both design and maintenance. Water efficiency is also embedded into our Sustainability Guidance for Capital Projects, along with a requirement to consider greywater systems such as rainwater collection.

Progress

We are on track for a reduction in our water consumption for 2022–23 (see Annex). Our reported water consumption in 2021–22 was higher than in previous years, which was likely

the result of changing suppliers during that period. The change required transferring the meter readings of water supplies in all of King's properties. Where the 2020–21 meters were not read prior to the change, any unbilled consumption was applied to the 2021–22 period, creating the appearance of increased consumption that year. Moreover, the university returned to full operational capacity in 2021–22, which resulted in more water being used across our campuses compared to the low figures in the previous year due to COVID-19.

Throughout 2023–24, Automatic Meter Readers (AMRs) are being installed on 36 of King's water meters. The AMRs will improve our ability to monitor water consumption across the estate. They will also improve our response time when leaks are detected so that they can be resolved quickly. The AMR data will be integrated with King's utility management software that automatically alerts the relevant teams when there are instances of constant, high and low water consumption.





7. Waste & resources

Targets

- Achieve 73 per cent recycling by weight of total non-hazardous office and residential waste in 2022–23, and 75 per cent in 2023–24 ●
- Reduce total annual operational waste produced by the university (excluding construction) by 35 per cent from 2017–18 to 2022–23, and 30 per cent by 2023–24 ●

Policy

Our approach to waste and recycling is governed by the **King's Waste and Resources Management Policy**, and the delivery is facilitated by the Waste and Resources Strategy and Action Plan 2021–2024. The policy sets out our commitments to managing waste sustainably and to continually improve and innovate how we do this.

Central to this approach is the hierarchy of 'Prevent, Reduce, Reuse, Recycle, Recovery, Disposal': avoiding the creation of waste in the first instance, minimising how much is created, repairing or refurbishing items for reuse where possible, and recycling waste that cannot be avoided or reused. Recovery – which creates energy from waste – and disposal should be avoided where possible.

Ensuring this is embedded into our procurement decisions is essential to preventing waste. Therefore, the policy commits King's to integrating the principles of whole of life cycle and circular economy into our operations. Our policy also commits us to eliminating disposable items where there are viable alternatives, providing training to staff and working with academic departments to promote and support teaching and research around sustainable waste and resource management.

Progress

The total operational waste generated for 2022–23 (until June) is just over 855 tonnes (see Annex), substantially lower than the target level of 1,559 tonnes given in the 2021–24 Waste and Resources Strategy and Action Plan. When comparing individual months of waste generated from pre, part, full and post-pandemic, waste generated over the past nine months is less than it has been in the past four years, except for 2020–21 during the pandemic. This waste reduction is likely due to hybrid working leading to fewer

people on site and more conscientious behaviour regarding generating waste.

King's recycling rate for 2021–22 was 55 per cent and for 2022–23 (until June) is 54 per cent, with monthly recycling rates ranging from 59 per cent in August 2022 to 50 per cent in February 2023. For the third year in a row, August had the highest rate of recycling, likely related to fewer people on site. Although this falls short of our target to recycle 73 per cent of waste, we continued our work to improve waste management across King's. As contamination of bins was found on sites during internal audits, we will conduct regular campus inspections and offer more waste management training for the cleaning team to improve our recycling rates.

King's appointed a new waste electrical and electronic equipment (WEEE) contractor, recycling both data-bearing and non-data-bearing WEEE. In addition to a more sustainable approach, WEEE rebates have contributed almost £10,000 to the Principal's Office's Central Strategy Fund to be spent on social purpose activity.

We continued to use and promote **Warp It** – an online portal that enables the redistribution and reuse of unwanted items. In 2022–23, more than 60 new users joined the portal to a total of 1,017, diverting 344kg of waste from landfill, which equates to 988kg of CO₂, one tree planted and financial savings of £3,161 (replacement, disposal and admin).

In May 2023, King's Volunteering established a **donations programme** where students and staff can donate items to charity on campus. The first donation drive provided 11 full bin bags to Little Village and the second drive is collecting donations for Get Rid Of and Donate. Several King's Residences also have schemes in place where residents can donate their belongings, including food items. Wolfson House, for example, established a collection system to upcycle, repair and donate these items to various charities, including social housing organisations and food banks. It has been successfully running this programme for more than four years, diverting items from ending up in landfill.



8. Carbon & energy

Targets

- Achieve net zero carbon emissions by 2025 ●
- Reduce energy emissions by at least 50 per cent by 2025, from a 2018–19 baseline ●

Policy

Through the King's Environmental Sustainability Policy, the university has committed to maximising energy efficiency and reducing our carbon emissions in line with limiting warming to 1.5°C.

Our **Carbon Management Plan 2010–20** outlined our journey towards reducing our scope 1 and 2 emissions by 43 per cent from 2005–06 to 2020, which was exceeded in 2019–20 with King's achieving an emissions reduction of 53 per cent.

To support our continued work towards reducing emissions, we have set new targets in **King's Climate & Sustainability Action Plan**. This plan was published in February 2023 after year-long consultations with students, staff, alumni and members of King's Climate Action Network (King's CAN). The plan sets new targets across 13 key impact areas, including at least a 25 per cent reduction in carbon emissions by 2025 and a 50 per cent reduction by 2030 across energy use, business travel, our supply chain, commuting and waste. The plan prioritises absolute reduction of carbon emissions over offsetting and carbon removals. That is why we have now set a 2030 net zero target to give us more time to focus and invest in direct emissions reductions on our estate and in our operations.

Progress

By the end of 2021–22, we reduced our carbon emissions by 53 per cent since 2005–06 using a location-based methodology and by 64 per cent using a market-based methodology¹, and a similar reduction is estimated for 2022–23 (see Annex). As King's directly purchases UK wind power, our carbon footprint is lower when using a market-based methodology. This difference has become smaller since April 2022, as King's no longer purchases REGOs (Renewable Energy Guarantees of Origin) due

to significant price increases. However, the Power Purchase Agreement (PPA) with wind farms in Scotland and Wales is still supplying us with renewable electricity, and King's College Hospital switched to renewable electricity in 2021.

We continue to reduce our emissions from utilities year-on-year and in 2021–22, we produced 5,101 kWh from on-campus photovoltaic energy. To continue progress towards net zero, a tailored plan is being put in place by Estates & Facilities (E&F) based on the operational actions of King's Climate & Sustainability Action Plan. One of our key challenges in achieving our carbon reduction targets is heating our buildings, as renewable and zero-carbon alternatives to natural gas are limited and expensive. Our Heat Decarbonisation Plan sets out how King's can reduce heating emissions, and we will be rolling out various projects as part of this.

To reduce energy consumption, we are implementing a LED lighting replacement programme (see Annex). The first phase of this is starting in the summer of 2023 with six buildings in Denmark Hill. An energy-planning working group has been formed to implement more energy-saving opportunities across the estate. There is £556,000 available in Salix funding to be used on these projects before 2025 and we recently applied for Salix/DESNZ funding for building fabric and glazing surveys across 43 buildings.

Throughout 2023–24, we will improve our energy and carbon reporting, as the database that King's uses to store and manage the university's utility data is being updated ahead of its migration to the new web-based platform. This migration will also enable budgeting and forecasting for utilities. Once completed, the platform will be made available to staff and students, as engagement and the sharing of information are vital to meeting our net zero target.

Our Building Management System (BMS) is critical to our carbon reduction efforts. Previously commissioned energy audits are being reviewed to ensure they are still relevant, and campus operating hours are being assessed and updated. Automated Building and Energy Controls (ABEC) have also completed a programme of rationalisation for BMS setpoints across each of the

¹ There are two key methods for calculating our carbon footprint, relating to our scope 2 emissions from electricity. The location-based method uses average carbon emission factors for each kWh of electricity we use, regardless of its origin or the tariff we have chosen. The market-based method takes into account the electricity we have purchased from renewable sources and assigns it zero carbon emissions.



campuses, which were reduced from 21 degrees to 19 degrees in winter and increased to 26 degrees for cooling in summer, in non-critical areas.

To better understand our energy consumption, a pilot project will be run on the King's and Strand Buildings. A smart digital twin will be created for each building which will connect and contextualise the building's energy, occupant and environmental data. This will be scanned by algorithms to flag anomalies and identify ways to operate the buildings more efficiently. The project aims to identify potential energy inefficiencies, provide recommendations to reduce energy consumption via a dedicated Energy Coach and track improvements during the pilot to ensure we achieve the predicted energy and cost savings. The project's initial assessment identified that 19 per cent to 20 per cent of total energy consumption occurs between 01.00 and 06.00 at both buildings, which will be one of the first areas to be investigated. The pilot programme is expected to produce energy savings of 5 per cent to 20 per cent, which over a year is a potential cost saving of more than £80,000 at the Strand Campus.

Students and staff got the opportunity to engage in energy-saving opportunities through the Energy Audit Day pilot session in April 2023 as part of the Energy

Champions project of King's CAN. They received training on energy auditing, followed by an audit led by the operations team at the James Clerk Maxwell Building (see King's CAN spotlight).

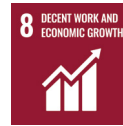
In recognition of the carbon footprint of the IT sector, the IT department at King's is also developing its own sustainability strategy, to be launched in 2023–24. It aims to embed four basic principles into the way it works, ensuring that all aspects consider the reduction of our carbon footprint. The principles focus on constant sustainability improvement, recording and monitoring sustainability in all services and making sure that carbon offsetting is reserved as a last resort, requiring authorisation at the vice principal level. Underneath these principles is guidance on how to achieve this through good procurement, operation, reuse and sweating of assets, and generally having sustainability as a significant decision factor in all operations. The strategy will also have a section on tactical initiatives to be implemented. King's Festival of Technology in June 2023 centred on climate and sustainability topics with a keynote on digital technology and net zero, as well as a challenge shared with all participants to reduce our digital carbon footprint by deleting unwanted videos on Microsoft Stream.





SPOTLIGHT ON

9. Responsible investment



Policy

The **Ethical Investment Policy** commits King's to making no direct investments in tobacco, divesting from all fossil fuel investments and investing 40 per cent of its funds in investments with socially responsible benefits by 2025.

Progress

In 2021, King's fully divested from fossil fuels almost two years ahead of target and since 2023, armaments are also excluded from investments. King's conducts ethical screening for cash deposits, which excludes companies that generate over 10 per cent of their turnover from armament, tobacco and/or fossil fuels.

In 2022–23, we also met our commitment to invest 40 per cent of funds in investments with a positive purpose two years early and King's only purchases green bonds to raise debt. We have invested £44 million in the Northern Trust's World Green Transition Index Fund, which not only

screens out fossil fuel producers and the worst 10 per cent of companies by carbon emissions intensity but also has a positive 'tilt' towards companies that generate 'green' revenue, such as energy efficiency and alternative energy. We also have £14 million invested in RobecoSAM's Sustainable Water Strategy, which invests in companies with innovative technologies and products across the water value chain that will help deal with the issue of water scarcity. During the year, £10 million was invested in the Polar Capital Smart Energy Fund, which invests in companies involved with clean power distribution, energy transmission and distribution, energy conversion and storage, and energy efficiency. £8 million was also invested in the GMO Climate Change Select Investment Fund, which invests in companies dealing with clean energy, batteries and storage, electric grid and energy efficiency.

The Ethical Investment Policy is due to be reviewed in 2023–24, which will provide an opportunity to work with the Finance Team to set new targets and further embed responsible investment principles in our policy.





10. Food



Targets

- Maintain a Sustainable Restaurant Association (SRA) rating of three stars for King's Food ●

Policy

Our **Sustainable Food Policy** commits King's to addressing sustainability impacts arising from our catering and hospitality operations while providing healthy and sustainable food for our students, staff and visitors. It sets out wide-reaching commitments in the areas of sourcing, society and environment, including an increased focus on local and independent suppliers, the removal of palm oil from food produced in-house, engaging with students and the local community to redistribute unsold food, removing beef from restaurant menus, and serving vegan and vegetarian options as the default options at meetings and events.

Progress

In July 2022, **King's received three stars** and an overall score of 80 per cent in the SRA's Food Made Good report. This demonstrates our progress around sustainable sourcing, society and the environment. In July 2023, King's Food was shortlisted for the sustainability category in the TUCO (The University Caterers Organisation) Awards.

Regarding vegetarian and vegan efforts, our in-house menu is about 70 per cent meat-free and 60 per cent vegan, and King's Food offer a minimum of one plant-based dish on the menus every day. We removed beef from our menus four years ago and from September 2023, lamb will no longer be on the student/staff dining menu. These decisions were based on the **high greenhouse gas emissions** associated with beef and lamb in particular. King's Food have partnered with Beyond Meat to create Beyond Meat Mondays, when the hot food choices in all outlets are either vegetable-based or a Beyond Meat dish. This has enabled us to bring Monday footfall back to pre-COVID levels (circa 1,100 covers each Monday) and saved a total of 15.6 tonnes of CO₂e. Offering a 100 per cent vegan menu has saved 20 tonnes of CO₂e emissions.

Since August 2022, as a default, all our hospitality sandwich platters are vegetarian and vegan, with clients having to opt in for meat or fish. 74 per cent of the 4,738 platters sold since then were vegetarian or vegan, saving 7.2 tonnes of CO₂e.

All pastries and most cakes in King's Food outlets are now vegan, which has saved 10.7 tonnes CO₂e since September 2022. There is no extra charge for oat milk, and King's Food is committed to vegan options being cheaper than the meat or fish option.

King's Food does not use palm oil in food produced in-house and ensures products in our supply chain only contain responsibly sourced and certified palm oil. It only serves sustainably caught fish from the UK and buys British high-welfare meat and dairy products and free-range eggs to combat animal cruelty and environmental damage. Farmers are selected based on their levels of environmental stewardship. In March 2023, King's Food held a **fruit and veg tender** where potential suppliers were assessed on – among other things – their responses to a set of sustainability questions, including product sourcing, food surplus, organic and Fairtrade-certified produce, and carbon footprint measuring.

To continue progress, King's Food has developed a Three-Year Menu Development Strategy 2026, implementing the **Menus of Change principles**. Menus have been re-engineered to an 'inverted menu design' principle, where local, seasonal and environment-friendly items are sourced first, with the menu written after. Themes include 'fast food not junk food' and 'quality not quantity', ensuring that sustainability is at the heart of menu development and that cultural diversity is celebrated. For example, 70 per cent of produce should be seasonal and either local or UK purchased.

King's Food will continue the development of new dishes in association with King's Department of Nutritional Sciences. Menus will increasingly focus on fibre, in particular whole grains, legumes and pulses, and include healthy snacks that display a percentage kcal per portion.

King's Food worked with students on a carbon tax project, examining if customer choices and purchasing habits change when informed of the carbon footprint of food and if higher carbon footprints should be priced higher. Based on a small sample of 27 participants, 74 per cent said they liked the carbon tax and 93 per cent said that it would affect their choice of food. As a result, the vegan option is now priced 50p lower than the non-vegan option, even though the costs associated are often higher. The carbon footprint mapping of the menus is currently available online and the team are working on communications to increase visibility in 2023–24.



To reduce food waste, King's Food partnered with Too Good To Go in 2021, which has saved approximately 2,905 items of food from being wasted, reducing CO₂e by 7.26 tonnes (as of July 2023). It provides compostable takeaway containers at hospitality events so that any leftover food can be taken away to avoid it being thrown away. King's Food started a monthly 'fighting food waste' group consisting of staff from the kitchens, front of house and hospitality. The group will review waste figures and proactively work on plans to reduce waste. From September, the food waste reduction efforts will be indicated with a logo and the tagline 'Love our leftovers'.

To reduce general waste, King's Food charges a levy on disposable coffee cups and cutlery, and provides a discount for bringing your own takeaway containers, such as for hot

food or salads. It has also eliminated plastic straws and cutlery from outlets and worked with suppliers to reduce packaging. It now stocks Bottle Up to reduce the use of single-use plastic bottles on campus, and free water is provided in all outlets.

For the first time in 2022, King's Food delivered fully sustainable catering for graduation ceremonies. Our medical graduations have 14,000 attendees over nine days in a temporary marquee. We offered a 100 per cent plant-based menu, fully compostable disposables and no single-use plastics. Using reusable polycarbonate glasses saved 14,000 disposable glasses from going to landfill. Prosecco was dispensed from reusable kegs instead of 2,333 traditional bottles, equating to savings of around 1 tonne of CO₂e emissions and 2.8 tonnes of manual handling weight.





11. Supply chain



Targets

- Develop a Fairtrade Action Plan 2022–24 to maintain Fairtrade University award ●
- Reduce supply chain emissions by 25 per cent by 2025, from a 2018–19 baseline ●
- Increase number of social enterprises and not-for-profits in our supply chain ●
- Implement supplier assurance tool to audit our supply chain ●
- Audit our major electronics suppliers via our partnership with Electronics Watch ●
- Increase awareness of the Socially Responsible Procurement Policy internally and externally ●

Policy

Embedding sustainability into our supply chain is fundamental to achieving our sustainability and climate aims, as the supply chain is our largest source of emissions.

Our **Socially Responsible Procurement Policy** is intended to ensure that King's purchases goods and services in ways that are beneficial to the university, the environment, society and King's local boroughs. It commits King's to using our purchasing power to improve conditions and raise expectations of social responsibilities in the external organisations we work with, for example by requiring all suppliers to agree to our Sustainable Supply Chain Code of Conduct.

It also aims to use local and small and medium enterprises where appropriate, increase the number of social enterprises in our supply chain, and incorporate social, economic and environmental criteria when awarding contracts.

Progress

In 2022–23, the Procurement Team continued making progress to make our supply chain more socially, economically and environmentally responsible.

In the summer of 2022, the Climate & Sustainability team offered a King's Undergraduate Research Fellowship on supply chain sustainability. The research fellow examined how King's can more accurately measure scope 3 supply chain carbon emissions and work alongside high-impact suppliers to improve supply chain sustainability. The literature review identified best practice for the measuring

of scope 3 emissions and potential challenges for King's. Following this, King's procurement data for 2020–21 was analysed to identify key sectors and high-impact firms in the supply chain. The report found that a mixture of approaches will be needed to calculate scope 3 emissions – including a supplier-specific method for high-impact firms and a mixture of hybrid or average-based methods for firms with lower carbon emissions. High-impact sectors include construction, business services (including property rentals), IT and medical products. A large proportion of total carbon emissions – approximately 60 per cent – could be captured by engaging with 100 of King's largest suppliers by spend, making the collection of carbon emissions data on a product-specific level both feasible and manageable.

Improving the accuracy of our supply chain emissions continues to be a priority. Currently, we calculate these via the Higher Education Supply Chain Emissions Tool (HESCET), but this spend-based approach is likely to misrepresent some emissions. Since June 2022, we have been working to put a contract in place with a new supplier that focuses on scope 3 carbon analysis through AI. This contract has been awarded to CO2Analysis and the work is under way. We should soon have more useful data about our supply chain emissions and be able to plan how to reduce them.

King's has signed a contract with Crown Workspace, which is now our preferred supplier for refurbished furniture. Its refurbished products often have a zero-carbon impact, as it aims to keep existing furniture in use for as long as possible. It will be supplying a range of goods and services to King's, including reused and refurbished furniture, and will help King's develop a more sustainable approach to furniture management in which we refurbish our stock where needed or buy from Crown Workspace's existing stock of used furniture. Other services provided include moves and changes and storage services.

In April 2023, King's Procurement implemented a supplier assurance tool to capture and report on a variety of supply chain risks, including modern slavery, unfair working practices, bribery and corruption. In addition to helping us improve the sustainability of our supply chain, the Supplier Assurance System (SAS) strengthens the relationship with (strategic) suppliers, protects King's financial investments via more consistent checks, ensures suppliers follow university policies and relevant UK legislation, and facilitates consistent communication with suppliers.



To improve supply chain transparency, King's has continued our partnership with the human rights monitoring organisation Electronics Watch. This partnership allows us to provide better assurance regarding the eradication of modern slavery and ethical employment practices in our IT hardware and electronics supply chains. In July 2023, the team participated in a meeting to discuss key challenges for a selected components factory in China that HPE and Dell Corporation are involved with. The discussion involved tier 2 supply chain responsibility and student workers as temporary workforce. The event was facilitated by the alliance between Electronics Watch and the Responsible Business Alliance and was attended by supplier representatives and customers of these suppliers, including King's and international universities.

We have also continued to engage our staff and students in supply chain projects through a dedicated project group in the King's Climate Action Network (see King's CAN spotlight). This group discussed organising supplier engagement events, went on two supplier site visits and met with various members of the Procurement Team to learn more about sustainable contracts. This also allowed us to increase awareness of the Socially Responsible Procurement Policy.

11.1 Fairtrade

King's is committed to being part of the Fairtrade Universities scheme and has set out a **Fairtrade Policy**. This policy aligns our commitments with the UN SDGs and the four categories that make up the Fairtrade University Award: Leadership and Strategy; Procurement, Retail and Catering; Campaigning and Influencing; and Research and Curriculum. Key commitments within the policy include buying and serving Fairtrade on campus, promoting the positive impacts of Fairtrade, and engaging students and staff through our Fairtrade and Sustainable Food Steering Group.

Our 2020–22 Fairtrade Action Plan helped King's get **recertified as a Fairtrade University** by the Fairtrade Foundation and Students Organising for Sustainability UK (SOS-UK) in July 2022, achieving two stars in the student-led audit.

Although a 2022–24 Fairtrade Action Plan is in draft stage, King's Food continuously looks for new Fairtrade products and ingredients to add to its menus and outlets. King's and KCLSU continue to serve Fairtrade as standard for coffee, tea and hot chocolate and offer a variety of other Fairtrade items such as fruit juice, chocolate and snacks.

As well as selling packaged Fairtrade items, King's Food sources Fairtrade raw ingredients including cocoa and sugar for use in its kitchens, ensuring that baked goods made in-house meet our ambition to serve ethical, sustainable food. In 2022–23, it sourced Fairtrade aprons from Koolskools and trialled Fairtrade polo shirts at the Science Gallery London.

To ensure our support of Fairtrade beyond catering outlets, Fairtrade is embedded into our Sustainability Champions programme, requiring teams taking part for an award to make the coffee and tea bought through departmental budgets either Fairtrade, organic or Rainforest Alliance certified.

We also aim to engage students and staff in our work around Fairtrade. Each year, we celebrate Fairtrade Fortnight with events and special offers. In 2023, we organised an **event on Ethical and Fairtrade Consumption** with Ethical Consumer and promoted a King's Food recipe for Fairtrade pancakes.

Our Fairtrade and Sustainable Food Steering Group continued to meet online in 2022–23, reviewing progress and discussing with students and staff how to further embed sustainability and Fairtrade into our operations. The last meeting was on 17 January 2023 and a new lead is being identified to continue this work.



12. Partnerships

Targets

- Engage with at least one local community project that promotes and improves the environment ●
- Take an active role in sector sustainability networks such as LUEG, LEAN and EAUC ●
- Engage with local councils on climate and net zero strategies ●

Policy

We recognise that as a university, we can have significant positive impacts by engaging with our local communities and supporting local sustainability projects. Our Environmental Sustainability Policy commits us to collaborate with internal and external parties to promote knowledge sharing and community engagement and to accelerate the achievement of local, regional, national and global goals. This supports wider work at King's to deploy our knowledge in service to society and to engage the communities we serve in London, the UK and globally through equitable partnerships.

Progress

Throughout 2022–23, we continued to build and grow links with communities around King's.

At the Strand Campus, we supported the City of Westminster in the development of the **Strand Aldwych project**, which officially opened in December 2022. The pedestrianisation of the area supports sustainable and healthy lifestyles through improved air quality, reduced noise pollution, larger pedestrian and cycle zones, increased cycle parking and improved cycle and pedestrian safety. Large, planted areas with year-round colour support biodiversity and pollinators in the area, with trees providing natural shade.

We also had regular conversations with Westminster City Council regarding its Citizens Assembly in July 2023, offering experts to present there and providing input at partner engagement workshops. King's was one of the first organisations to join the Lambeth Climate Partnership Group to help deliver Lambeth Council's ambitious Climate Action Plan. We attended meetings to learn about and feed into partners' initiatives.

Regarding sector sustainability networks, we engaged in EAUC (The Alliance for Sustainability Leadership in Education) meetings, offering updates on initiatives including biodiversity and energy and water. We collaborated with London-based universities on the **London Student Sustainability Conference 2023**, an inter-university **COP27 debate**, and Repair Week events and communication campaigns, and participated in and hosted knowledge exchange meetings.

A staff member was an assessor in the London Universities Purchasing Consortium (LUPC) Waste Management Framework and we presented at The Energy Club. We also presented at internal sustainability Building User Group (BUG) and Laboratory User Group (LUG) meetings relating to WEEE and lab waste. The new Sustainability Lead in the Research Management & Innovation Directorate (RMID) at King's is continuing involvement in the Laboratory Efficiency Action Network (LEAN).

King's partnership with Citizens UK was extended to the King's Climate Action Network. Citizens UK is Europe's largest and most diverse alliance of civil society institutions that empowers communities to act together for power, social justice and the common good. We collaborated on a listening campaign, training staff and student volunteers on community organising and asking our local communities what is important to them regarding climate. In April 2023, we co-organised a Communities for Climate event, bringing together members of South London Citizens and King's to start building a strategy to act on the sustainability issues that matter most to all of us.

We also continued to work with local Business Improvement Districts (BIDs) and attended the relaunch of the Better Bankside Environment Theme Group. BIDs and other organisations including Transport for London and Westminster City Council were also project hosts in the **Sustainability in Practice module**.

Sustainability is a core focus of the European University Alliance Circle U. In May 2022, King's hosted the first Circle U National Conference, focusing on **'Teaching and living leadership for addressing Sustainable Development Goals – the role of universities'**. King's Climate & Sustainability team also presented at Circle U meetings about our Education for Sustainability projects and explored opportunities to collaborate on the KEATS Sustainability & Climate module.



13. Clean air, travel & transport

Targets

- Implement at least two clean air initiatives recommended by Business Low Emission Neighbourhoods ●
- At least 75 per cent of King's directly controlled fleet to be zero/low emission vehicles (excluding sports ground off-road vehicles and King's Food static food/drink vehicles) ●
- Increase number of bicycle parking spaces across the estate ●
- Reduce business travel emissions by 60 per cent by 2025, from a 2018–9 baseline ●
- Set baseline for student end-of-term travel ●

Policy

King's is committed to addressing its environmental impacts from all operations, and sustainable travel covers three important areas within this: business travel, commuting and student end-of-term travel.

The **King's Travel Policy and procedures** encourage staff travelling on behalf of King's to consider environmental sustainability when booking travel arrangements. The policy allows for more expensive land-based travel over flights, therefore not prioritising cost over sustainability.

Our Environmental Sustainability Policy also commits us to contribute to reducing air pollution around our campuses. To do this, King's has set a target to replace existing university-owned vehicles with electric vehicles and aims to encourage active travel such as cycling and walking to and between our campuses.

While internationalisation and our global outlook are at the core of King's Vision 2029 and are a source of significant positive impacts, we recognise the need to acknowledge the carbon impacts associated with this.

Progress

Following a period of reduced international travel due to COVID-19, business travel picked up again in 2021–22 and 2022–23. However, reliance on virtual meetings and conferences due to COVID-19 restrictions accelerated the uptake of digital solutions and alternatives to travel. As a result, more meetings and conferences are being offered virtually, and more participants carefully consider the value of going there in person, balancing it with considerations

such as time and sustainability. In February 2023, the Department of Geography organised an event on air travel in academia, discussing the challenges of reducing this and important equity considerations.

We actively engage with our travel providers to make it easier to book low-carbon travel options, for example, by sorting journeys by the 'greenest' option and integrating carbon offsetting at the point of sale. We are also exploring conducting a sustainability audit provided by one of our travel providers, to benchmark our sustainable travel practices against peers and best practice globally and identify areas for improvement.

The travel providers also support our carbon footprint reporting. Data will be affected due to a recent university decision to no longer require bookings to be made through our approved travel providers. We are identifying the best way to continue gathering data for our reporting, whether through specific questions on expense forms or by utilising alternative tools.

Staff Sustainability Champions are required to analyse their departmental travel data and to work with other colleagues to develop a sustainable travel plan to gain an award. We developed a **sustainable travel guide** to support this work. From September 2023, we will be including sustainability considerations in departmental travel inductions for staff.

The Travel Policy is due to be reviewed in summer 2023, which provides an opportunity to embed more sustainability considerations and further align it with the targets in King's Climate & Sustainability Action Plan.

To encourage more active travel, the cycling project in the King's Climate Action Network has been working to set up a cycle bank for abandoned bikes, organised a cycling campus tour in collaboration with Swapfiets and the King's Cycling Club and created competitions via King's Move (see King's CAN spotlight). We also regularly promote opportunities for free bike repairs offered by organisations including Team London Bridge.

King's Capital Projects and Sustainability teams also launched a travel survey in June 2023 to see how staff and students' modes of travel to campus have changed since COVID-19. The survey asks about factors influencing their mode of travel, the distance travelled and what if anything might encourage them to consider more sustainable modes



of travel (namely walking or cycling). This will highlight improvements we can make to encourage more active travel and help us understand how our carbon footprint from commuting has changed since 2020–21, which is likely to have decreased as hybrid working has become the norm.

To reduce emissions from our fleet, we are replacing our existing university-owned vehicles, which are used to transport goods between campuses, with electric vehicles. We are working on the procurement of the electric fleet and are developing a clear branding message. We also explored the use of cargo, electric or push bikes for inter-campus shorter journeys, but this project is currently on pause.

On Clear Air Day on 15 June 2023, King's staff from the ReSET (Restarting Economy in Support of Environment,

through Technology) project offered a guided tour of the dense network of weather and air pollution monitoring stations at Strand Aldwych. Although we continue to reduce air pollution and support clean air by decarbonising our fleet and encouraging active travel, the Business Low Emission Neighbourhoods initiative is no longer active.

Regarding student end-of-term travel, we are yet to establish a methodology to estimate emissions from students travelling to and from London at the start and end of the term. We have already been engaging with students to help them understand their footprint and enable them to take action on climate, and we will work with them to identify how community-building activities and other initiatives could help reduce the need for travel.





14. Construction & refurbishment



Targets

- BREEAM assessments carried out on all new buildings/ major refurbishments as required by planning ●
 - New builds to achieve minimum 'Excellent'
 - Major refurbishments to achieve 'Very good'
- All large-scale fit-out projects to apply King's Sustainability Guidance (Capital Projects Brief) and Checklist, or complete SKA assessment ●

Policy

The King's Environmental Sustainability Policy commits King's to managing construction, refurbishment and post-completion occupancy of our buildings to reduce environmental impact and enhance the wellbeing of building users. Embedding sustainability considerations into our construction and refurbishment projects is fundamental in achieving our sustainability targets, reducing our carbon emissions and achieving the Estates & Facilities (E&F) aim to provide a safe and sustainable estate.

Our Sustainability Guidance for Capital Projects sets out core principles, requirements and guidelines for how sustainability should be considered as part of construction and refurbishment projects.

In 2021, E&F created a 'Strategy and Action Plan for Embedding Sustainability in Capital Projects'. This document re-examined King's existing approach to embedding sustainability, including lessons learned, and identified where improvements could be made. This plan provides a clear roadmap with specific actions to ensure the delivery of these improvements. This live document gives project managers the impetus and authority to embed sustainability into refurbishments and new builds and offers guidance on engaging with other departments at King's whose input is essential to the longevity, sustainability and overall maximisation of the use of each building.

Progress

Throughout 2022–23, the Sustainability and Capital Projects teams continued embedding sustainability in construction and refurbishment:

- London Institute for Healthcare Engineering (LIHE) is on track to achieve a BREEAM rating of 'Excellent' and the building is nearing completion.
- The South London and Maudsley NHS Foundation (SLaM, CYP) is progressing towards a BREEAM rating of 'Excellent'.
- The Rayne Gene Therapy Vectors Facility (GTVF) has a current score of 56 per cent for BREEAM 'Very Good', which is considered normal for this stage of development. Completion is expected in September 2023 and the team is investigating ways to achieve improved performance.
- The BREEAM accreditation being aimed at for refurbishment of Bush House Southwest Wing is still undecided, although a WELL feasibility study has been conducted.

We continue to aim for BREEAM, SKA or EnerPHit accreditations for projects. The Weston Education Centre achieved a SKA Gold accreditation in March 2022.





15. Biodiversity

Targets

- Implement at least 75 per cent of the agreed 2022–23 opportunities identified in the Biodiversity Action Plan ●

Policy

King's is committed to maintaining and enhancing green spaces on our campuses to support biodiversity and health and wellbeing through our Environmental Sustainability Policy. To promote biodiversity on our estate, we developed our Biodiversity Action Plan, which assesses the current state of biodiversity on our campuses and recommends actions in four key areas: the exterior of our buildings, new capital developments, our grounds and open spaces, and our sports grounds.

Progress

Based on the Biodiversity Action Plan, 11 of the actions identified for 2022–23 were completed (23 per cent), 12 (25 per cent) are in progress and 25 (52 per cent) have not yet been started. Actions not yet started or still in progress are mostly because they were paused due to COVID-19 or are no longer relevant to the ever-changing estate. However, several actions that were not originally part of the

Biodiversity Action Plan were still carried out. This includes planting 480 new trees in the HOP sports ground in the past 18 months, with 400 donated by Conservation for Volunteers and an additional 80 from KCLSU.

To increase the biodiversity value across the estate, improve our outdoor spaces and enhance the staff and student experience, the Colman Terrace was refreshed and several plants repotted. Six new planters containing several different species of vegetation were added to the Macadam Building's Café Terrace and an additional 32 planters were installed in both the King's and Bush House quads. With the added benefit of a **newly pedestrianised Strand Aldwych area** – formerly a busy street with heavy traffic – running through the middle of our campus, biodiversity at the Strand Campus has significantly improved in 2022–23.

At King's Guy's Campus, a new biodiversity garden was installed at the rear of New Hunt's House, the newest building. The central part of the garden is made up of 60 tonnes of cleaned rubble and recycled sand, sourced from construction projects across the London Bridge area. In the Science Gallery Courtyard & Colonnades, the team worked with Scotscape to **enliven the flower beds and borders**. This project aimed to replant these beds with an emphasis on pollinator planting, biodiversity and medicinal plants, incorporating sustainable planting practices.





16. Sustainability engagement



Targets

- Minimum 90 per cent of eligible E&F staff to complete Fit for King's sustainability module within 12 months of induction ●
- Achieve at least 600 hours of student engagement opportunities ●
- Achieve minimum of 60 Staff Sustainability Champion teams completing Bronze, Silver or Gold level (including LEAF) ●
- Enrolling 250 students in the Sustainability KEATS module, with at least 150 students completing the module ●

Policy

King's Environmental Sustainability Policy commits us to providing opportunities for students and staff to actively engage in the sustainability work of the university. In addition, we are committed to providing training and giving students the opportunity to embed sustainability in their formal and informal education.

Progress

In 2022–23, the Climate & Sustainability team offered volunteering opportunities through five projects in the King's Climate Action Network, as well as a listening campaign, the KEATS Sustainability & Climate module Take Action Team, an inter-university project on curriculum quality for sustainability, the Staff Sustainability Champions scheme, a student auditing opportunity and King's Community Garden. In total, this adds up to 8,460 hours of volunteering. Volunteers were encouraged to log their hours through King's new **Volunteering Platform** to gain rewards and recognition. More information about each of these projects can be found throughout the report.

194 hours of events were organised throughout the year, reaching 2,178 people. During Welcome to King's, we organised various online information sessions and in-person community-building events such as a quiz and a hackathon. In addition to joining general Welcome Hubs across all campuses, we joined a range of faculty- and department-specific welcome fairs and inductions to raise awareness of sustainability and promote opportunities to get involved. As part of a monthly Sustainability Seminar Series, we held monthly seminars on Black environmentalism, COP27,

brands and business sustainability, the renewable energy transition, economic impacts of climate change, indigenous rights and conservation and environmental, social and governance (ESG).

Throughout February, King's welcomed more than 800 students, staff and alumni to 39 social and educational events as part of the annual **Climate and Sustainability Month**. Organised by King's Climate & Sustainability team in collaboration with various departments and students at King's, the month aims to offer participants an opportunity to learn more about sustainability topics, collaborate and connect with others from across King's and take action around the SDGs. The programme included events on interactive climate simulators, behaviour change, mindfulness and breathwork, and seed bomb making, as well as a dedicated Careers in Sustainability week with panel discussions and a networking night. During the month, King's hosted the **London Student Sustainability Conference 2023** in collaboration with nine other London-based universities. This student-led conference highlighted student research and projects that aim to make the world a more sustainable place, giving a platform to 36 student presenters and 58 poster exhibitions.

Throughout the month, ResiLife's Community Facilitators organised more than 50 events on sustainability in King's Residences, attracting over 300 student attendees. Events included sustainable film nights showcasing documentaries and films such as *Life on Land* and *Wall-E*. Activities ranged from repurposing trash for art and old crisp packets for blankets for the homeless to tie-dying t-shirts, sustainable meal prep and crochet. Other events focused on conversations about sustainability, including tea talks, debates, poetry, storytelling and interactive quiz nights.

With the support of paid part-time student Sustainability Engagement Assistants, the Sustainability communications received a boost with regular features in Student News, King's Essentials and faculty newsletters; the following grew on our social media channels, blog and fortnightly newsletter (see Annex); and we migrated our content to the new King's webpages. Between August 2022 and July 2023, reach on Instagram increased by 228 per cent. One key area of success to boost engagement was the development of short-form video Reels, which received up to 6,204 views.



In October 2021, we launched the first season of the **King's Spotlight on Sustainability podcast**, co-hosted by the Climate & Sustainability team and students. Since then, three series totalling 21 episodes have gone live. The first series focuses on tackling climate change with big and small actions, the second on climate justice and the third on sustainable careers. A fourth series on the impacts of the climate crisis on mental health has been recorded and will be released in 2023.

We have continued to work with KCLSU on their Sustainability Week as part of King's wider Climate and Sustainability Month. We also held networking events for sustainability-focused student societies; organised an **inter-university COP27 debate** in collaboration with the Climate Action Society; partnered with the Liberal Arts Society, Fashion Society and Environmental Society on a Clothes Swap; and partnered with the King's Cycling Club to host a cycling tour.

16.1 Staff Sustainability Champions

The **Sustainability Champions scheme** is our dedicated programme to engage staff in behaviour change. Staff can take part in the office programme, which is part of the national SOS-UK Green Impact scheme. Since 2020, staff working in laboratories can also join the Lab Efficiency Assessment Framework (LEAF) initiative (see Spotlight on: Climate Research). The Sustainability Champions programme started in 2013 with 17 staff members participating and has grown to more than 370 staff members in the 10 years since. Our Champions work across all areas of King's, including faculty offices, teaching spaces, E&F, research labs and King's Residences.

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

In summer 2022, the Champions workbook was updated to respond to feedback from participants. The number of

actions was reduced by 50 per cent and actions were made to feel less like 'tick box' exercises. The current workbook consists of seven mandatory actions that all teams need to complete to achieve Climate and Sustainability Foundation level. Bronze contains an additional three actions, Silver has an additional four actions and Gold contains a Gold Action Plan and a case study. The actions concentrate on our biggest areas of carbon emissions – supply chains, travel and energy use. We also kept 'embedding sustainability' and 'communication' as dominant themes.

Throughout the year, 11 educational events and seven drop-in sessions were organised to support the teams, in addition to providing them with 1-2-1 support. At the end of the academic year, Champions submitted their workbook online. The Green Impact Champions were audited by trained King's students and the LEAF Champions peer-audited each other's laboratories. In total, 366 individuals and 62 teams took part in the network. 39 teams received Sustainability Awards: 24 Gold, six Silver, eight Bronze and one Foundation. These were awarded during the annual Sustainability Awards ceremony in July 2023, which celebrates the hard work of our Sustainability Champions and sustainability volunteers across the organisation.

To showcase the achievement of our Sustainability Champions, we published a **2021–22 Sustainability Champions Stories booklet**, which contains case studies from teams across the university. The 2022–23 booklet will be published in the next academic year.

In addition to our Sustainability Champions programme, we offer opportunities for staff to learn about and get involved in sustainability. When staff join King's, our Environmental Sustainability Policy forms part of their induction checklist. The Climate & Sustainability team regularly present at Welcome to King's events run by the Organisational Development team, as well as a range of departmental and directorate meetings. Many of our sustainability initiatives, such as the King's Climate Action Network and our KEATS Sustainability & Climate module and seminar series are open to staff as well as students.

Within E&F, sustainability forms a key part of the Fit for King's training programme. All staff joining E&F go through the Fit for King's programme, which includes training sessions on service delivery, being inclusive, wellbeing and professional communications. Sustainability is included in the initial induction and a dedicated



sustainability workshop is part of the core programme. This ensures that E&F staff, who are key to sustainability through their roles in areas such as maintenance, campus operations, catering, security and cleaning, have a good understanding of sustainable practices and King's commitments in this area. In 2022–23, 87 per cent of E&F staff had completed the Fit for King's sustainability module as of May 2023, expecting a completion rate of 91 per cent by August 2023. The regular Fit for King's workshops on sustainability are also ongoing.

16.2 King's Climate Action Network (King's CAN)

The **King's CAN** is an open, interdisciplinary forum to directly contribute to King's climate and sustainability plans. Launched in October 2020, it aims to bring together sustainability and climate expertise and passion from the King's community to create and implement our Climate & Sustainability Action Plan. The Network is open to all King's students, staff and alumni. It was launched in recognition of the need to invite our community to co-create solutions with us in order to take meaningful climate action. By collaborating, we can ensure our Climate & Sustainability Action Plan reflects the ambition, fresh ideas and engagement of the King's community.

In 2022–23, the CAN grew to 434 members and focused on the implementation of actions to progress towards the aims set in the Action Plan. These actions were driven through five key Take Action teams, focusing on energy auditing, cycling, education, schools engagement and supply chain sustainability. Several of these Take Action teams were led by paid part-time student coordinators, and about 100 CAN members signed up as volunteers.

Energy (& Water) Champions

This group worked to develop an Energy (& Water) Champions scheme, where students and staff can learn about energy efficiency and energy management while helping King's achieve its energy emission and water reduction ambitions. The group held regular catch-ups throughout the year to develop training and an audit form, discuss communications and impact statements, explore an easier procedure to report energy and water wastage, and identify recognition needs for those taking part in the scheme. In April 2023, the group organised an Energy Audit afternoon to pilot the developed training and audit form. Two similar sessions are being planned for the 2022–23

academic year, and the group is exploring how to engage more students and staff as 'eyes and ears on the ground' for energy and water wastage throughout the year.

King's Cycle Bank

This group aims to encourage the King's community to cycle more and make cycling more accessible. Each year, more than 50 bicycles are left on campus and at King's Residences and the redistribution of these bikes is a major focus of the project. The group communicated with King's Residences and Campus Operations teams to locate and assess abandoned bicycles, which will be donated to charities or offered to the King's community. The group updated the procedure for abandoned bikes and is now planning a larger bike auction or giveaway during Welcome to King's in September 2023. Several residences already have similar procedures in place.

Moreover, the project aims to promote cycling as a sustainable, enjoyable and healthy transportation option for students, staff and visitors at King's. The King's CAN collaborated with the King's Cycling Club and Swapfiets on a **cycling tour** of King's campuses, offering participants the opportunity to try a bike free of charge and explore London guided by experienced cyclists.

Education for Sustainability (EfS)

This project aims to strengthen EfS at King's by involving students as co-creators of their curriculum. The project adopts a community organising approach and the team is working on training materials to empower students to conduct 121 conversations with academics to identify examples of and barriers to EfS implementation at the university. These insights will help develop toolkits to support academics in EfS implementation, tailored to their specific subject needs. The group also worked on a student-led survey on the current state of EfS at King's to identify where the biggest gaps lie. By engaging students, the project aims to bring together bottom-up and top-down EfS efforts and give students a bigger say in shaping their sustainable curriculum.

To encourage dialogue, collaboration and participation in this project, the group conducted monthly meetings where academics pitched their progress in implementing EfS in the curriculum and discussed them with other staff as well as students. The project team started gathering this progress as case studies of **best practice examples of EfS** at King's to be shared publicly on the sustainability blog.



Schools engagement

This project focuses on engaging with local school audiences to disseminate King's climate and sustainability knowledge. The group explored various organisations to partner with and met with King's existing volunteering partner Climate Ed to strengthen this relationship. At least four students and staff from King's volunteered with Climate Ed in 2022–23 to teach children about climate change. The group also had conversations with the Widening Participation and Schools and Colleges Liaison teams to explore embedding climate and sustainability into existing programmes and events. The group initiated a listening campaign with teachers from the Widening Participation contacts to better understand where King's could add value and to evaluate developing our own tailored content.

Supply chain sustainability

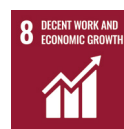
This group aims to support King's progress towards a more environmentally and socially sustainable supply chain. The group explored organising supplier engagement events (Q&A discussions) to question suppliers on their sustainability plans while providing students and staff with a learning opportunity. The group was invited on supplier site visits to a greengrocer and a furniture company, and more events may be organised in the next academic year. Students and staff from this group met with members of the Procurement Team to gain knowledge and share ideas about drafting more sustainable contracts. The group also explored opportunities to improve supply chain data by sending out supplier questionnaires and setting up a Power BI dashboard.





SPOTLIGHT ON

17. Education for Sustainability



King's Strategy 2026 strengthened the university's commitment to embedding sustainability into education and the student experience. By 2026, we aim to provide environment, climate and sustainability taught and extra-curricular education for all King's undergraduates, expanding our research-enhanced postgraduate programmes alongside Continuing Professional Development and Executive Education.

King's is implementing a flexible curriculum approach through which all undergraduate students will get the opportunity to take a module or make up a minor on climate and sustainability topics. Professor Rachel Mills was appointed as the Senior Sponsor for the Education for Sustainability (EfS) work and an Education Working Group will be established in September 2023 to facilitate progress.

King's already offers many undergraduate and postgraduate degree programmes and more than 100 modules on sustainability and climate change. In 2021–22, a student-led curriculum audit took place across the university that analysed 1,000 modules and courses to understand their links to the SDGs. They were also mapped against Education for Sustainable Development (ESD)² teaching and learning approaches, which include methods such as case studies, problem-based learning and participatory learning. The **results from the ESD audit** indicate that 43 per cent of our core modules connect to the SDGs and these insights are shaping our next steps to embed ESD.

Following on from this audit, King's participated in a collaborative project in 2022–23 with the University of Gloucestershire (UoG) and the University of the Arts London (UAL). Funded by the Quality Assurance Agency (QAA) for Higher Education, this project aimed to create a blueprint for quality sustainability learning and assist students in all degree programmes to be a driving force for sustainability practice at their university. The project draws on an EfS module rating approach, first developed at UoG. The three participating universities tested and refined the rating approach, adapting the principles to each university setting and specific courses examined. This work was done with the help of trained students to assess the quality of EfS integration at their home institution, identifying best practice examples and areas for EfS development. The **project outputs** include a 'blueprint' of quality principles and criteria for EfS and an 'anti-greenwash education kit' for students.

The next step to keep King's students at the heart of shaping their sustainable curriculum is being driven through the EfS project in the King's CAN. This project adopts a community organising approach to empower students to conduct 121 conversations with their academics to identify examples of and barriers to EfS implementation at the university (see King's CAN spotlight).

In 2022–23, the **Sustainability in Practice module** led by the Department of Geography ran for a second time. The module uses an interdisciplinary approach to help students learn how they can combine their knowledge to meet the SDGs. Through problem-based learning and a 'Living Lab' approach, students address sustainability challenges working with project hosts from across King's and partner organisations such as Transport for London and Westminster City Council. Projects from the 2022–23 academic year included an analysis of the benefits of urban greening; making King's online procurement catalogue more sustainable; expansion of the Biodiversity Action Plan; and reducing the carbon footprint of King's Food.

In February 2023, the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care at King's was **awarded the established Beacon Site Status** by the Centre for Sustainable Healthcare for embedding sustainability principles in its undergraduate and postgraduate programmes. The faculty is the first in the UK Higher Education sector for nursing and midwifery to receive this esteemed accreditation.

Recent new programme developments centring climate and sustainability include a new Natural Sciences BSc/MSci. This programme covers the full spectrum of subjects across the natural sciences (biology, chemistry, computation, mathematics and physics) to address today's global challenges, including climate change and green growth. In King's Business School, an Environmental, Social, Governance Management MSc is starting in September 2023, introducing students to cutting-edge theoretical and applied research on the management of ESG matters.

² We use ESD and EfS interchangeably here, as they have similar definitions and aims.



17.1 KEATS Sustainability & Climate module

Following on from a Hackathon in February 2021, a listening campaign in the summer of 2021 and work undertaken by the Students and Education group of the King's Climate Action Network, King's developed an online module on sustainability and climate. This module sought to fill a gap in sustainable education while empowering the King's community to take action.

'Sustainability & Climate: Learn, Discover, Take Action' is a fully co-created, open access and interdisciplinary module covering the biggest topics in sustainability from climate change and food to sustainable finance and social justice. More than 50 students, alumni, academics and professional services staff have developed the module across the years in a dedicated Take Action Team – it is a module that has been designed by them, for them.

The key aim of the module is not just to equip participants with sustainability knowledge but for them to develop the agency to take action on the issues that most concern them. Despite it being online, the module has been created to be as interactive as possible by embedding Padlets, pledges and discussion forums throughout the course. It has been complemented by a Sustainability Seminar Series and other events to build a sense of community and support participants in developing transferable skills.

Content in the module was set by the Take Action Team. The 15+ sections include setting the scene of sustainability (exploring 'What is Sustainability?' and the SDGs) and a deeper analysis of social, environmental and economic areas of sustainability, including circular economies, sustainable banking, eco-anxiety, food systems and climate justice. The module has a variety of learning modes, including videos, podcasts, case studies, quizzes and forums.

The module's Learning Outcomes are:

- ♦ Engage with others around the topic of sustainability.
 - ♦ Feel inspired to act and identify how to take action in relation to real-world sustainability issues, recognising interconnected economic, environmental and social perspectives.
 - ♦ Demonstrate your sustainability knowledge and skills in relation to your future career plans.
- To gain recognition through a King's Experience Champion for Change Award, participants are required to complete the two-part assessment. The personal statement encourages them to reflect on their learnings to explain why they deserve an award. The creative submission asks them to reflect on actions for sustainability they have taken or could take and express these through, for example, a narrated presentation, poem, podcast, poster or video.
- In the 2021–22 pilot year, 630 students and staff enrolled on the module and 122 of them completed it for an award. In the 2022–23 academic year, 997 people enrolled and 281 of them completed it for an award. Participants reported a 37 per cent increase in sustainability knowledge (from 5.56 to 7.60) and a 35 per cent increase in their ability to take action on sustainability (from 5.61 to 7.55). 93 per cent (somewhat) agree that the module has filled a gap in their current sustainability curriculum at King's, but 90 per cent would like the module to be accredited.
- 'This module has been fantastic in helping me explore new perspectives on sustainability and climate that I hadn't considered before. I think, most importantly, it has led me to discover resources that have really pushed me to move out of the "learning" space and into the "active" space – doing something about the issues that concern me, rather than just being concerned about them.'* Student who completed the KEATS Sustainability & Climate module
- ♦ Critically engage with the Sustainable Development Goals (SDGs) and progress that has been made around them and discuss interconnectivities between the goals.
 - ♦ Describe how sustainability is relevant to your academic field and identify gaps in your own sustainability education.
 - ♦ Explore connections between the climate crisis and inequality and reflect on your position in relation to this.



SPOTLIGHT ON

18. Climate research



In 2022–23, King's committed to a **major step up in its research on climate and sustainability**. With a strategic focus on the multidisciplinary research needed to enable a just transition for sustainability, King's provided almost £6 million of its core funds to help connect and scale research across all its faculties over the next three years.

Several new centres and networks will help provide focus points for research, education and partnerships.

The interdisciplinary **Net Zero Centre** was launched in April 2023 – bringing together research from across the university on decarbonisation and circular economies, connecting King's rapidly growing expertise in engineering, informatics and physical sciences with proficiency in economics, social and business change, law and beyond. The launch included a panel event with sector voices from across academia, industry, finance and government, including Chris Skidmore OBE MP, Chair of the Independent Government Review on Net Zero and author of Mission Zero: Independent Review of Net Zero.

King's committed new funds to create a Centre in Sustainable Business based in King's Business School, which will launch in 2023–24.

In February 2023, King's launched the **Environmental Humanities Network**, recognising that in the Anthropocene, human culture has a central role in shaping the future physical systems of the planet and exploring the ethical and moral considerations that underpin societies' response to environmental challenges. The Network builds on King's collaborations with **PLuS Alliance partners** Arizona State University and the University of New South Wales.

On World Water Day in March 2022, the **King's Water Centre** was launched – an intentional collaboration space for transformative water-based research.

Putting research into practice, a new **partnership programme was launched to address scorching wildfires in Europe** in August 2022. The work is part of FirEURisk, a European-funded project that fosters knowledge transfer between European countries to prevent and manage the threat posed by major wildfires. As a partner in the £10 million **Leverhulme Centre for Wildfires, Environment and Society**, King's is helping develop a wildfire management strategy that will be rapidly applied and tested in pilot and demonstrator sites across Europe. King's experts are

working on better detection and monitoring of fires, as well as on helping estimate the effect of the smoke on air quality and people's health.

In May 2023, **King's joined 10 other institutions** across London in the Centre for Ecology & Evolution. As part of its responsibilities, King's will be involved in the committee and hosting events. This includes the Autumn Symposium and mixer, due to be hosted at King's in September 2023.

King's new investments also include a **King's Climate & Sustainability Seed Fund** (internal access only). This will help develop new interdisciplinary research and partnerships, to the stage where they can attract external research funding. Two calls will be run each year through 2023–25. In the first round in May 2023, £200,000 was awarded for five ambitious research ideas:

- How artificial ice reservoirs could address water insecurity.
- Effects of extreme heat events on mental health in cities and how far urban green spaces can mitigate these.
- Better understanding the properties of cryogenic fluids likely to be used in carbon-free aviation.
- Addressing the environmental impacts of AI and digital technologies in healthcare systems worldwide.
- How political actors, capital, labour and lobby groups are interacting with rapidly changing energy policies.

Sustainability is also a priority for King's work in culture, with a **seed fund** being launched for Early Career Researchers (ECRs) across King's to enable the development of project proposals with artists on the theme of sustainability.

To share knowledge and foster interdisciplinary connections, King's began a workshop programme focused on research themes – beginning with health and sustainability – and a series of broader networking events bringing together researchers, staff and students. The first event (April 2023) featured pitches from the King's community, including King's Climate & Sustainability team, the Institute for Responsible Business, Enactus



(KCLSU), start-ups from King's20 Accelerator and the Leverhulme Centre for Wildfires, Environment and Society. The second event in May had a special focus on sustainable healthcare innovations.

Staff and researchers also remain actively involved in the UK Universities Climate Network (UUCN) and in supporting the development of research-informed policy through partnerships with UK Government and in following the United Nations Framework Convention on Climate Change (UNFCCC). In 2022, King's **sent a delegation of researchers to COP27 to observe the negotiations and share perspectives on the role of universities** in supporting a just transition, together with partners from UK-based and international universities.

18.1 Sustainability in laboratories

University laboratories are energy- and waste-intensive spaces, typically requiring three to 10 times more energy per m² than typical academic spaces, and their activity consumes considerable amounts of single-use plastics. Therefore, they are key to achieving our climate and sustainability ambitions.

Since 2020, we have run LEAF through our Sustainability Champions programme, empowering lab users at King's to measure and reduce their environmental footprint. In 2022–23, 967 Champions and 44 teams signed up to the LEAF platform, generating CO₂ savings of 282 tonnes. 26 of these teams submitted their LEAF workbooks, with more than 50 per cent (16) receiving Gold, five achieving Silver and five achieving Bronze awards. We aim to enrol 100 per cent of our labs in the LEAF programme.

To drive a step change in these efforts, a passionate new team within Research Platforms in the RMID is dedicated to reimagining laboratory research practices for sustainability. This team has been set up in recognition of the substantial gains that can be made through labs towards our carbon reduction and waste targets, due to their energy- and waste-intensive nature.

In collaboration with colleagues from across faculties and E&F, this endeavour aims to drive a transformation in our research operations, fostering sustainable practices and paving the way for innovative sustainability initiatives in labs. The goal is to develop a comprehensive Research



Sustainability Programme that integrates measures and activities into a pioneering actionable roadmap. Through investigation of energy consumption, procurement and waste generation, the team will identify areas for improvement and direct initiatives that minimise our ecological footprint. The team aims to secure funding for sustainability-focused projects to enable novel ways of reducing King's carbon footprint through the exploration of emerging technologies. The roadmap will propel our research community towards practices that merge ground-breaking research with environmental awareness.

An important project in 2022–23 was the **Freezer Exchange Scheme**. In April 2022, King's committed £1 million to improve the sustainability of the cold storage and biobanking infrastructure used by our research teams to reduce the energy consumed by more than one million kilowatt hours per year. One year on, the Freezer Exchange Scheme is on track to reaching this goal, achieving a net annual reduction of more than 200,000 kilowatt hours in our first year, enough energy to power more than 65 average UK homes. King's has recycled 40 old freezers and installed 20 new ones, releasing more than 72 m² of laboratory space. The Freezer Exchange Scheme has been extended until July 2024.



19. 2023–24 sustainability targets

TOPIC AREA	TARGET	TIMESCALE	RESPONSIBLE
Environmental management	Maintain an Environmental Management System (EMS) to the standard of ISO 14001:2015	July 2024 (annual)	Estates & Facilities (Sustainability Manager for Operations)
	Achieve a reportable environmental pollution incident rate of zero	July 2024 (annual)	Estates & Facilities
Water	Reduce consumption of water by 2 per cent each year from 2013–14 (cubic metres per total FTE – staff and students)	July 2024 (annual)	Estates & Facilities (Energy Team)
Waste and resources	Achieve 75 per cent recycling by weight of total non-hazardous office and residential waste in 2023–24	July 2024 (annual)	Estates & Facilities (Sustainability Manager for Operations)
	Reduce total annual operational waste produced by the university (excluding construction) by 30 per cent from 2017–18 to 2023–24	July 2024 (annual)	Estates & Facilities (Sustainability Manager for Operations)
Carbon and energy	Achieve net zero carbon emissions by 2030	July 2030	Estates & Facilities, King's Climate & Sustainability Delivery Team
	Reduce Scope 1 and 2 emissions by at least 25 per cent by 2025 and 50 per cent by 2030, from a 2018–19 baseline	July 2025	Estates & Facilities (Energy Team, Heat Decarbonisation Programme Lead), King's Climate & Sustainability Delivery Team
Food	Maintain a Sustainable Restaurant Association (SRA) rating of three stars for King's Food	July 2024 (annual)	King's Food
	Start the implementation of the 'Menus of Change' principles, where environment-friendly items are sourced first, and the menu is written after	July 2024 (annual)	King's Food
Supply chain	Maintain Fairtrade University award of at least two stars	July 2024 (annual)	King's Climate & Sustainability Delivery Team, Estates & Facilities, King's Food, KCLSU
	Reduce supply chain emissions by 25 per cent by 2025 and 50 per cent by 2030, from a 2018–19 baseline	July 2025	Procurement Team
	Increase number of contracts delivering social value	July 2024 (annual)	Procurement Team
	All key suppliers meeting or committing to King's supply chain assurance standards	July 2024 (annual)	Procurement Team
	Audit our major electronics suppliers via our partnership with Electronics Watch	July 2024 (annual)	Procurement Team
	Increase awareness of the Socially Responsible Procurement Policy internally and externally	July 2024 (annual)	Procurement Team



TOPIC AREA	TARGET	TIMESCALE	RESPONSIBLE
Partnership and community engagement	Engage with at least one local community project that promotes and improves the environment	Annual: July 2024	Estates & Facilities, King's Climate & Sustainability Delivery Team
	Take an active role in sector sustainability networks such as LUEG, LEAN, EAUC and LUPC	Annual: July 2024	Estates & Facilities, King's Climate & Sustainability Delivery Team
	Engage with local councils on climate and net zero strategies	Annual: July 2024	Estates & Facilities, King's Climate & Sustainability Delivery Team
Clean air, travel and transport	Implement at least two clean air initiatives	Annual: July 2024	Estates & Facilities
	At least 75 per cent of King's directly controlled fleet to be zero/low emission vehicles (excluding sports ground off-road vehicles and King's Food static food/drink vehicles)	July 2024	Estates & Facilities
	Increase number of bicycle parking spaces across the estate	Annual: July 2024	Estates & Facilities (Campus Operations Teams)
	Reduce business travel emissions by 30 per cent by 2025 and 50 per cent by 2030, from a 2018–19 baseline	July 2025	Procurement Team
	Set baseline for student end-of-term travel	July 2024	King's Climate & Sustainability Delivery Team, Estates & Facilities
Construction and refurbishment	BREEAM assessments carried out on all new buildings/major refurbishments as required by planning <ul style="list-style-type: none"> • New builds to achieve minimum 'Excellent' • Major refurbishments to achieve 'Very good' 	Annual: July 2024	Estates & Facilities (Capital Projects)
Biodiversity	Implement at least 75 per cent of the agreed 2023–24 opportunities identified in the Biodiversity Action Plan, and 100 per cent by 2025	July 2024	Estates & Facilities (Sustainability Manager for Operations)
Training and awareness	Minimum 90 per cent of eligible Estates & Facilities (E&F) staff to complete Fit for King's sustainability module within 12 months of induction	Annual: July 2024	Estates & Facilities (Sustainability Manager for Operations)
Sustainability engagement	Achieve at least 600 hours of student engagement opportunities	Annual: July 2024	King's Climate & Sustainability Delivery Team
	Achieve minimum of 60 Staff Sustainability Champions teams completing Bronze, Silver or Gold level (including LEAF)	Annual: July 2024	King's Climate & Sustainability Delivery Team
	Enrolling 1,000 students and staff in the online KEATS Sustainability & Climate module, with at least 200 completing the module	July 2024	King's Climate & Sustainability Delivery Team

A more detailed and longer-term overview of our targets, KPIs and actions can be found in **King's Climate & Sustainability Action Plan**.

20. Annex

20.1 Carbon emissions

Table 1: Total scope 1 and 2 carbon emissions (based on the Estates Management Record)

METRICS	2005–06 (baseline)	2018–19	2019–20	2020–21	2021–22	2022–23
Scope 1 & 2 carbon emissions (tonnes)	52,389	30,617	24,506	25,909	24,559	26,616
Reduction compared to baseline (location-based)		-42%	-53%	-51%	-53%	-49%

Table 2: Detailed scope 1, 2 and 3 carbon emissions (based on the Estates Management Record)

The below data is based on the 2022–23 submission to the Estates Management Record, aligned to GHG Protocol categories for carbon emissions reporting. *Refrigerants, f-gas and VOC*, as well as scope 3 categories 10–15 are not included as they are currently out of scope.

SCOPE	CATEGORY	2022–23 ENERGY CONSUMPTION (kWh)	2022–23 emissions (t)	2021–22 emissions (t)	EMISSIONS V. PREVIOUS YEAR
1	Natural gas	51,873,725	9,489	9,599	-1%
	Fleet	-	10	21	-52%
	Other fuels	-	448	283	58%
2	Purchased electricity	69,886,514	14,471	12,897	12%
	Purchased heat and steam	12,233,375	2,198	1,760	25%
3	Purchased goods & services	-	388,836	374,221	<1%
	Purchased water	-	67	46	46%
	Waste generated in operations	-	18	26	-31%
	Wastewater	-	76	83	-8%
	Business travel	-	3,812	3,044	20%
	Employee commuting	-	1,331	1,114	19%
	Student commuting	-	5,320	5,564	-4%

**Table 3: Overall changes in water consumption in m3 and per FTE, 2017–23**

ACADEMIC YEAR	VOLUME OF WATER USAGE IN m3	COMPARISON FROM PREVIOUS YEAR m3	WATER CONSUMPTION PER FTE (m3/FTE)	% CHANGE FROM PREVIOUS YEAR WATER USAGE IN m3/FTE	EXPLANATION FOR OBSCURE DATA
2013–14	288,596	n/a	10.3	n/a	
2014–15	385,252	+29%	13.3	+29%	
2015–16	329,409	-18.7%	10.8	-18.7%	
2016–17	338,627	+3.7%	10.4	+3.7%	
2017–18	407,367	-13.4%	11.8	-13.4%	
2018–19	332,336	-21%	9.3	-21%	
2019–20	646,705	+86%	17.3	-86%	COVID flushing
2020–21	335,077	-60%	6.89	-60%	New contractor, improved meter readings
2021–22*	326,596	-2.53%	8.03	+16%	Expansion of improved meter readings and more people on campus
2022–23**	288,402	-12%	7.09	-12%	Financial year incomplete. (2021–22 FTE figure used***)

*Data for 1 August 2021 to 31 July 2022.

**Data for 1 August 2022 to 31 May 2023.

***FTE for 2021–22 is 40,668.

**Table 4: LED lighting recommended projects**

RECOMMENDATION	ESTIMATED ANNUAL SAVINGS			ESTIMATED COST (£)	PAYBACK (YEARS)	TIMESCALE	RESPONSIBILITY
	(£)	tCO2	kWh				
LED lighting upgrade David Goldberg	27,265	29	136,323	96,477	3.5	Summer 2023	HDP lead*
LED lighting upgrade Henry Wellcome	35,897	38	179,487	129,299	3.6	Summer 2023	HDP lead*
LED lighting upgrade CSI	21,087	22	105,435	40,578	2	Autumn 2023	HDP lead*
LED lighting upgrade Wellcome Foundation	3,214	3	16,072	4,390	1.4	Autumn 2023	HDP lead*
LED lighting upgrade SGDPRC	90,295	96	451,473	215,365	2.4	Autumn 2023	HDP lead*
LED lighting upgrade Resp Med	15,551	15	77,753	15,472	1.0	Autumn 2023	HDP lead*

*HDP lead = Heat Decarbonisation Programme lead



20.2 Waste & resources

Table 5: Waste generation target and progress

	2021–22	2022–23**	2023–24
Percentage against 2017–18 baseline (2,398 tonnes) as per strategy targets	-40%	-35%	-30%
Maximum waste generation target (tonnes)*	1,439	1,559	1,678
Waste generated for the year	1,193	943	TBC
Percentage change against target (maximum waste generation) (tonnes)	-17%	19%	TBC

*Maximum waste generation targets (tonnes) have been revised and the action plan updated accordingly.

**Data for the 2022–23 year is from August 2022 to July 2023 where July data was replicated from June data, as July data had not yet been compiled.

Figure 1: Total operational waste by disposal method per month (kg) in 2022–23

Note: AD = anaerobic digestion, EfW = energy from waste.

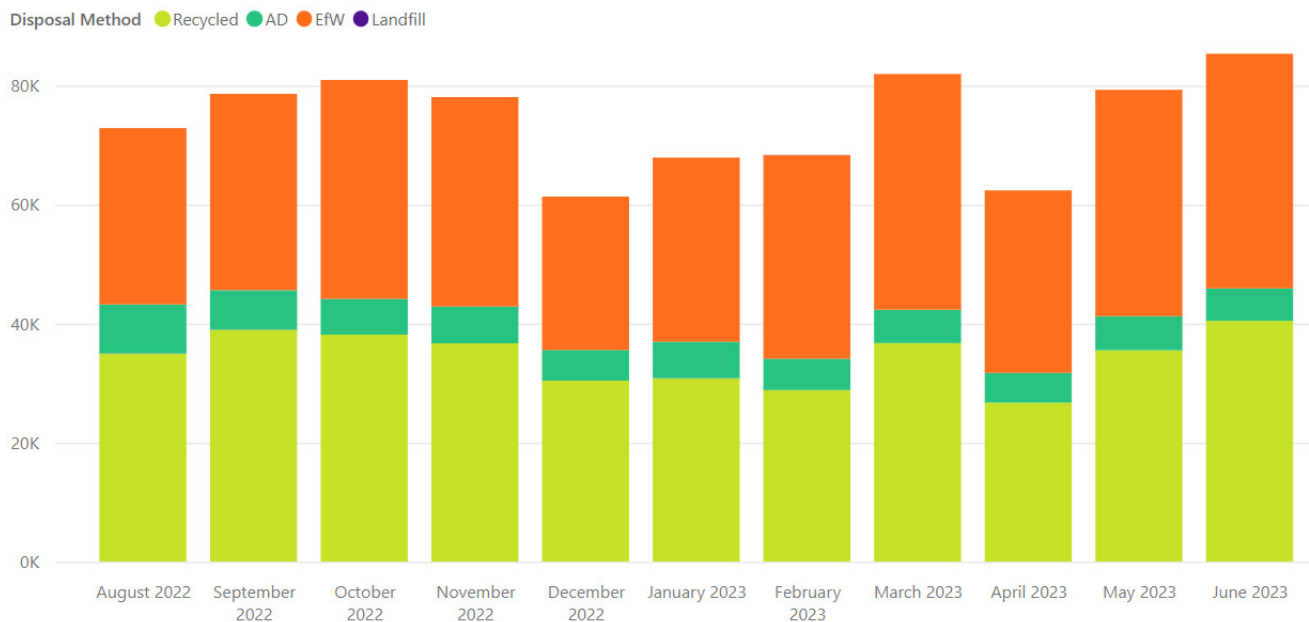



Figure 2: Total operational waste (kg) per property (campus and residences) in 2022–23

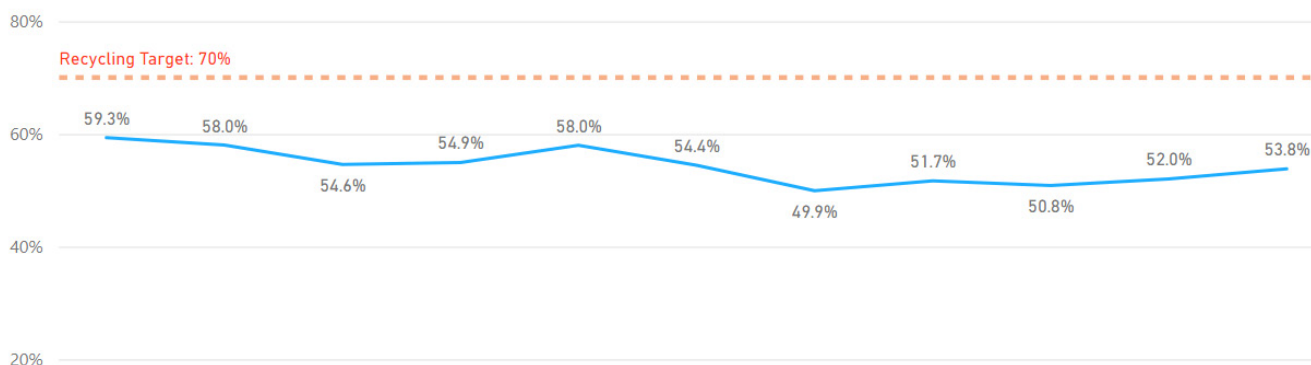
Table 6: Total operational waste per month (kg) in 2022–23

AcademicYear	August	September	October	November	December	January	February	March	April	May	June	July	Total
2017/18	214,085.34	182,210.59	211,144.43	214,025.86	174,554.09	189,975.48	199,477.08	199,082.00	188,924.00	186,740.00	218,927.00	219,023.00	2,398,168.87
2018/19	225,593.91	191,415.48	219,950.36	191,591.85	162,866.20	181,185.92	170,542.35	182,167.07	158,740.16	190,148.40	182,038.21	188,356.88	2,244,596.78
2019/20	154,458.50	188,474.50	202,944.56	174,332.31	152,491.83	172,480.24	181,200.99	156,745.79	29,581.72	41,734.93	51,084.35	57,293.78	1,562,823.50
2020/21	77,291.22	90,451.64	88,203.44	79,463.54	57,892.80	47,412.41	55,217.31	80,841.43	91,340.79	90,745.52	117,101.14	100,288.02	976,249.26
2021/22	91,377.09	117,126.89	116,127.98	123,291.35	105,229.76	105,451.62	123,424.04	134,379.11	102,098.35	150,450.65	126,936.22	124,469.72	1,420,362.78
2022/23	82,767.00	87,937.00	90,125.00	87,645.00	61,437.00	67,931.00	68,328.00	81,978.00	62,413.00	79,447.00	85,494.00	330.00	855,832.00
Total	845,573.06	857,616.11	928,495.77	870,349.90	714,471.67	764,436.67	798,189.78	835,193.40	633,098.02	739,266.50	781,580.91	689,761.40	9,458,033.18

Table 7: Waste generation targets and progress

	2021–22	2022–23*	2023–24
Annual recycling rate target %	70%	73%	75%
Annual recycling rate %	55%	54% TBC	TBC

*Data for August 2022 to June 2023.

Figure 3: 2022–23 recycling rate against the 70 per cent target




20.3 Sustainability engagement

Table 8: Student and staff engagement opportunities, 2022–23 (events/meetings)

PROJECT	TOTAL HOURS	TOTAL ESTIMATED ATTENDANCE
Sustainability Seminar Series	10	313
Climate & Sustainability Month 2023	37	792
London Student Sustainability Conference 2023	6	198
Welcome to King's (September 2022 and January 2023)	46	995
Sustainability Champions	40	246
King's Climate Action Network	38	191
Climate listening campaign	22	79
QAA EFS project	5	16
Other events	16	680
Kaltura plays	1.5	25
Podcast listeners	0.5	191
Total*	194	2,178

*Data for September 2022 to May 2023.

Table 9: Student and staff engagement opportunities, 2022–23 (engagement projects outside of events/meetings)

PROJECT	TOTAL HOURS	TOTAL ESTIMATED
KEATS Sustainability & Climate module*	300 x 20 hours 600 x 1 hour	954 participants
Sustainability Champions teams submitting their workbooks	37 teams (1-8 people) x 15 hours	371 members
King's CAN volunteers	30 active volunteers x 5 hours	434 members, 87 volunteer sign-ups
Listening campaign volunteers	15 active volunteers x 5 hours	39 sign-ups
Total**	8,460 hours	1,844

*Module Take Action Team being set up again to continue co-creating the module over summer 2023.

**Data for September 2022 to May 2023.



Table 10: Communication channels followers/subscribers as of July 2023

SOCIAL PLATFORMS	FOLLOWERS/VIEWS
Instagram (@Kings_Sustainability)	2,254 followers
Twitter (@KCLSustainable)	3,294 followers
Facebook (King's Sustainability)	1,400 followers
Spotify & Anchor (Spotlight on Sustainability)	122 subscribers, 410 listens
Newsletter	1,442 subscribers
Student app	13,000 users, 27 subscribers
Kaltura	29 followers, 88 videos
YouTube	4,000 views
King's Sustainability blog	1,131 subscribers
MICROSOFT TEAMS/EMAIL LISTS	
Sustainability Champions (MT)	369 members
Climate Action Network (MT)	433 members
Climate Hub (email list)	250 recipients
KEATS Sustainability & Climate Module (email list)	997 enrolled
YAMMER GROUPS	
Sustainability Champions	352 members
King's Vegan Network	35 members
Sustainability	116 members
Active Travel	78 members



Stay in touch

We welcome your thoughts on the sustainability agenda at King's. If you have any comments or would like to get involved with sustainability at King's, please get in touch with us at **sustainability@kcl.ac.uk**.

For further information on our sustainability initiatives, visit **kcl.ac.uk/climate-sustainability**

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