

**ENVIRONMENTAL
SUSTAINABILITY**
Report

2017–18



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COVER PHOTO: GUY'S CAMPUS BY NICK WOOD

Sustainable Development Goals

King's College London recognises that as an educator, we have a responsibility to play a central and transformational role in advancing the Sustainable Development Goals (SDGs) by 2030. The SDGs are a set of 17 goals aimed at transforming the world by 2030 and were approved by the 193 member states of the United Nations (UN) in 2015. To showcase how our work relates to the Sustainable Development Goals, we have highlighted the relevant goals in each section of this report.



Introduction

King's Strategic Vision 2029 states that 'our vision is to make the world a better place' and sustainability is one of the enabling foundations of this vision. The Strategic Vision sets out five priorities: Education, Research, Service, London and International. 'Service' is the term adopted at King's to describe our commitment to society beyond the traditional roles of education and research. In July 2018, we launched the 'Service Strategy: A framework for delivery 2018-23'. This highlights environmental sustainability as part of its definition of what it means to serve society, recognising the important role sustainability plays in our commitment to society. Delivering against the UN Sustainable Development Goals means embedding sustainability into our research, our education and into how the university operates.

The annual Environmental Sustainability Report outlines how King's is working towards protecting the environment and embedding sustainability into the university. The sections within the report relate to the environmental sustainability targets set out against our key impact areas. Each section also highlights the relevant Sustainable Development Goals.

Key highlights of progress this year include:

Carbon reduction

King's has successfully decoupled its growth from growing carbon emissions. We have a target to reduce our carbon emissions by 43% by 2020 compared to our 2005-06 baseline, and aim to be net zero carbon by 2025. Despite the significant growth of the university since the baseline year we have reduced our carbon emissions by 37% compared to 2005-06. Over the past year despite the continued growth in student numbers and the addition of new buildings such as the iconic Bush House, our energy consumption has remained stable.

King's has been using the campus as a 'living lab', and this year trialled the 'Hot Water Research Project',

an innovative initiative that could contribute to national carbon saving targets by removing non-essential hot water in buildings.

The university is also making progress on its commitment to divest from fossil fuels and has reduced its investment in companies that own fossil fuel reserves from 7.3% to 3.5%.

Waste and recycling

Following extensive improvements to the way waste and recycling is handled at the university, King's has raised its recycling rates from 39% in August 2017 to 56% in July 2018. This significant increase in recycling rates was made possible through an increased focus on waste which included having a dedicated member of staff, and accurate and timely data provided by the university's new waste contractor which enabled us to identify improvement actions and tailor solutions to specific campuses and buildings.

Warp It, our internal furniture re-use system, has significantly grown in 2017-18, saving over £96k and 41 tonnes of CO₂.

Staff and student engagement

Our number of active Sustainability Champions has grown to over 260 members of staff across the university. Now in their second year, the Gold Action Plans have successfully engaged teams across King's and enabled them to find creative ways to embed sustainability into their departments. The King's Libraries Sustainability Champions were Highly Commended in the 2018 Green Gown Awards for the actions taken in their Gold Action Plan.

Students continue to engage with sustainability by volunteering with the sustainability team. In 2017-18, students volunteered for 267 hours, and the sustainability team offered 534 hours of student opportunities such as training and events.

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 by emailing sustainability@kcl.ac.uk

Target overview 2017–18

Target: **TARGET ACHIEVED/ON TRACK** **PROGRESS TOWARDS TARGET** **TARGET NOT ACHIEVED**

Carbon	Reduce absolute carbon emissions to achieve a 43% reduction in scope 1 and 2 carbon footprint from a baseline year of 2005–06 by 2020	
Waste	Achieve 60% recycling by weight of office and residential waste	
	Establish baseline for total annual operational waste produced by the university	
	Maintain zero non-hazardous waste to landfill	
Water	Reduce consumption of water by 2% annually by 2020 (cubic metres per staff/student FTE) from a 2013–14 baseline	
Leadership and governance	Maintain ISO14001:2015 accreditation for all Estates & Facilities directly managed sites	
	Maintain environmental pollution incident rate of zero	
Supply Chain	Achieve Level 4 of Flexible Framework for procurement	
	Retain Fairtrade University Accreditation	
	Attain membership of the Sustainable Restaurant Association's Food Made Good programme	
Transport	Update and implement Sustainable Transport Plan for the university	
Construction	Carry out BREEAM assessments on all new buildings and major refurbishments as required by planning: new buildings to achieve minimum rating of 'Excellent', major refurbishments to achieve minimum rating of 'Very Good'	
	Implement Soft Landings procedure to ensure smooth handover from construction to use	
Biodiversity	Develop Biodiversity Action Plan for the whole estate	
Staff and Student engagement	1,000 hours of opportunities for students	
	Maintain Sustainability Champions programme to engage wider university	

2017–18 highlights

 <p>37% reduction in carbon emissions since 2005–06</p>	 <p>267 hours volunteered by students on environmental sustainability projects</p>
 <p>100% Since 1st October 2017, all electricity directly purchased by King's comes from 100% UK wind power</p>	 <p>49% of waste recycled or reused</p>
 <p>1,832 actions completed as part of the Sustainability Champions scheme</p>	 <p>Warp It Over £96k and 41 tonnes of CO₂ saved through furniture and equipment reuse</p>
 <p>534 hours of student engagement and awareness opportunities</p>	 <p>3.5% Reduced exposure of investments in companies that own fossil fuel reserves to 3.5%</p>

Carbon



Target
Reduce absolute carbon emissions to achieve a 43% reduction in scope 1 and 2 carbon footprint from a baseline year of 2005-06 by 2020

● TARGET ACHIEVED/ON TRACK

**Location-based and market-based methods for carbon reporting*

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. As King's directly purchases UK wind power, our carbon footprint is lower when using the market-based method.

Annual scope 1 and 2 carbon emissions (tonnes CO ₂ e)							
Scope	Unit	2005-06	2013-14	2014-15	2015-16	2016-17	2017-18
Total CO ₂ e	tonnes	52,389	42,607	39,416	39,013	36,475	32,904
University income	£000	387,951	603,668	684,225	738,286	778,150	841,030
CO ₂ e per £000 of income	tonnes	0.14	0.07	0.06	0.05	0.05	0.04
Staff and student numbers	FTE	21,764	28,031	28,888	30,616	32,669	34,521
CO ₂ e per FTE	tonnes	2.41	1.52	1.36	1.27	1.12	0.95
Space NIA*	m ²	-	218,683	236,985	247,440	252,452	250,191
CO ₂ e per m ² NIA*	tonnes	-	0.19	0.17	0.16	0.14	0.13

*Net internal area

Policy

King's is committed to reducing the university's carbon emissions through the Environment and Sustainability Policy. The Energy and Carbon Management Policy specifies further commitments towards reporting, funding and efficiency objectives. We have set the targets to reduce our carbon footprint by 43% by 2020, compared to our 2005-06 baseline, and to be net zero carbon by 2025.

Progress

We have reduced our carbon emissions by 37% since 2005-06, which brings us closer to achieving our 43% reduction target by 2020. These reductions were made despite significant university growth over that time in staff and student numbers and the size of our estate. Our carbon savings were achieved through utilising our estate more effectively, investment in continued energy efficiency and carbon reduction measures, as well as the reduction in carbon intensity of electricity from the national grid.

While all electricity directly purchased by King's has been sourced from 100% UK wind power backed by Renewable Energy Guarantees of Origin (REGO) certificates since 1st October 2017, we continue to report progress against our

Reporting on F-gas

Fluorinated gas, also known as F-gas, refers to gases used within refrigeration and air conditioning equipment.

If leaked into the atmosphere these gases have a high global warming potential, often over one thousand times higher than the equivalent amount of CO₂. Due to this, they are tightly controlled, and leak checks for some large units take place every six months. Improvements in reporting these leak tests have enabled us to record and calculate our emissions from the leak of F-gases. In 2017-18, the first year of reporting, these emissions were equivalent to 243 tonnes of CO₂. This is now accounted for in our scope 1 emissions, and going forward we will be reporting on F-gases every year with the goal to continually minimise these emissions.

2020 carbon emissions target using a *location-based methodology according to the UK grid electricity emission factors. This ensures that we continue our work on energy efficiency measures to reduce our electricity consumption. If using a *market-based methodology which accounts for emissions from the renewable electricity we purchase as zero, our scope 1 and 2 carbon footprint for 2017-18 is 22,345 tonnes of CO₂e, a 57% reduction from our 2005-6 baseline.

Challenges and opportunities

We have set the ambitious target to be net zero carbon by 2025, which poses a great challenge to King's. With seven

Energy efficiency at Franklin-Wilkins Building and New Hunt's House

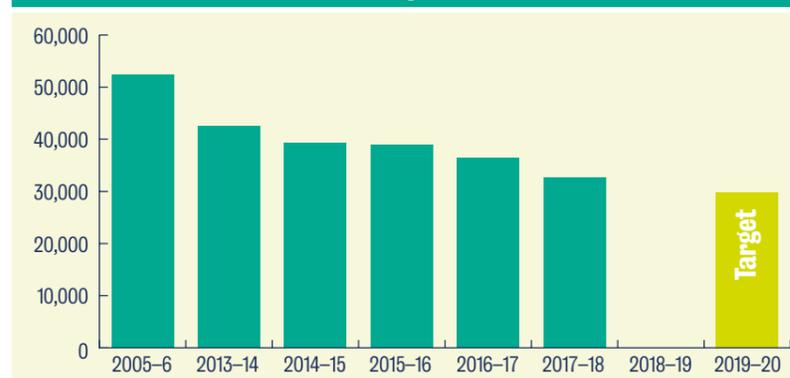
Two large research-intensive buildings, Franklin-Wilkins Building at Waterloo Campus and New Hunt's House at Guy's Campus, are managed by Bouygues Energies and Services under a private finance (PFI) contract. These buildings alone represent a quarter of King's carbon footprint. They are the focus of an energy reduction project delivered by Bouygues, and so far the campaign has delivered significant energy savings. Franklin-Wilkins Buildings saw a 7% reduction in electricity consumption, while New Hunt's House saw a 15% reduction.

A staff and student engagement campaign titled 'Re-energise' was run alongside installations of more efficient equipment like LED lighting, more efficient air handling units, and the improvement of heating and cooling controls, and students and staff were able to submit their energy-saving ideas through the King's website. To launch the Re-energise campaign, Bouygues hosted a screening of 'An Inconvenient Sequel: Truth to Power' and information evening in early 2018.

Sources of King's carbon emissions in 2017-18

Scope	Emissions Source	Tonnes CO ₂ e
Scope 1	Natural gas	11,157
Scope 1	F-gas	243
Scope 1	Gas oil and diesel	64
Scope 1	Fuel for university-owned vehicles	24
Scope 2	Electricity	19,394
Scope 2	Steam and hot water	2,023
Scope 3	Supply chain	107,319
Scope 3	Business travel - air	7,955
Scope 3	Third-party Residences	3,302
Scope 3	Electricity transmission & distribution	1,653
Scope 3	Water supply and treatment	429
Scope 3	Business travel - other	65
Scope 3	Waste	55

Scope 1 and 2 carbon emissions (tonnes CO₂e)

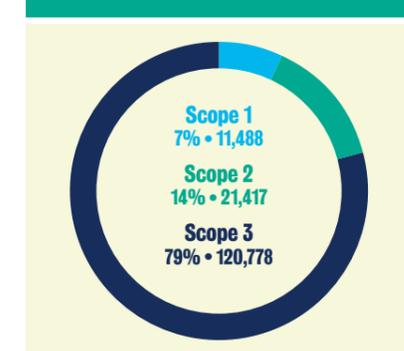


years remaining until the target year, and a forecasted growth in student numbers, King's will need to ensure that space is used more efficiently, and that wide-reaching low-carbon and energy reduction projects continue to be carried out across the university. We will also have to work with our partners such as the NHS trusts in spaces where we do not have direct control.

We must also define what net zero carbon means for King's and importantly, that includes defining the scope of future targets. Our 2020 target is based on our scope 1 and scope 2 carbon emissions which are emissions from our direct use of energy, including our gas and heating, electricity, any fuel used by university vehicles, and losses of fluorinated gases.

We currently report on key elements of our scope 3 emissions where we have the data available, but data quality varies and is not complete in all key areas. In 2018-19 we will work to establish an improved scope 3 baseline for business travel and supply of goods and services. This is important as we cannot exclude King's scope 3 emissions where they are measurable and significant if we are to limit King's negative contribution to climate change.

King's carbon emissions per scope in 2017-18 (tonnes CO₂e)



Carbon *(continued)*

The Hot Water Research Project

In 2017–18, King's led on a global research programme to test the theory that we could reduce carbon emissions and energy use by reducing non-essential hot water supplies on university campuses. This 'living lab' project was carried out as part of King's membership of the Global Consortium for Sustainability Outcomes, an international group of universities aiming to implement and scale solutions that address critical sustainability challenges.

The project estimated that turning off non-essential centrally supplied hot water in a building, for example for hand washing in bathroom sinks, could reduce a building's carbon footprint by 3–5%. Non-essential hot water was turned off in the Waterloo Bridge Wing at

Waterloo Campus, and point of source supplies of hot water were installed in key areas such as catering, showers and laboratories.

As part of the Hot Water Research Project, the project team carried out surveys and focus groups with building users about their opinions on turning off non-essential hot water. While staff and students are generally supportive of sustainability initiatives, there was opposition to this project as many users felt hot water is necessary for hygiene and comfort reasons. The surveys and focus groups showed that engagement and communication were key to overcoming these barriers for support. Alongside information on the sustainability benefits of the Hot Water Research Project, guidelines around safe handwashing were circulated in the pilot buildings.

Initial results were better than expected and removing non-essential hot water reduced carbon emissions from one building by 10% compared to the same period in the previous year.

The greatest challenge to the project were the current Workplace (Health, Safety and Welfare) Regulations 1992, which require the provision of hot or warm water in both washing facilities and all wash basins in sanitary facilities. In the long-term, the aim for this project is to influence regulations to remove this requirement for areas where hot water is not essential, and to scale the initiative and associated carbon savings by broadening it to other public buildings. This could not only help King's reduce its carbon footprint but could have a significant nationwide impact.

Spotlight on ethical investment



Policy

The King's College London Ethical Investment Policy commits King's to make no direct investments in tobacco, and to divest from all fossil fuel investments by the end of 2022. In addition, King's aims to invest 40% of its funds in investments with socially responsible benefits by 2025. Both commitments are

subject to there being no significant impact upon financial risks and returns, and details on where the university's endowment funds are invested are made publicly available on the King's financial information webpages.

Progress and opportunities

In 2017–18, King's has made progress in working towards its Ethical Investment Policy. The Investment Sub-committee of the university considers socially responsible investment as part of its asset allocation and investment manager selection progress. The King's endowment

is invested in funds that are reviewed to ensure they operate within our Ethical Investment Policy. In July 2017, our exposure to fossil fuels was 7.3%, which means 7.3% of our total investments at the time were in companies which own fossil fuel reserves. By July 2018, our exposure to fossil fuels was 3.5%, a significant decrease from the previous year. The Investment Sub-committee will continue working towards reducing our investments in all fossil fuels to zero.

In addition to this, the university's exposure to both tobacco and controversial weapons has been reduced to zero.

Sustainable transport



Target

Update and implement Sustainable Transport Plan for the university

● TARGET NOT ACHIEVED

Policy

The King's Green Transport Policy aims to encourage sustainable travel for those studying and working at King's, as well as those visiting our campuses. This includes promoting walking, cycling and public transport, and reducing the use of individual vehicles run by the university.

Progress

In 2017–18, we continued to make improvements to our cycling facilities in response to the bicycle users survey that found that staff and students were generally satisfied with cycling facilities, but that improvements were necessary – including the provision of more spaces to meet high demand and more secure parking facilities. Two new secure cycle storage facilities

along with changing rooms and lockers were opened in Bush House, 80 new rack spaces were added to the Strand Lane facilities and new secure cycle storage facilities were put in at Denmark Hill.

King's provides cycle maintenance sessions regularly as part of events like Sustainability Week, giving students and staff the opportunity to have their bikes checked and small repairs carried out for free.

To find out more about how students and staff travel to and between campuses, we launched a pilot travel survey in Spring 2018, before launching the full survey in Autumn 2018.

Challenges and opportunities

The full travel survey will be open to King's students and staff in the first term of 2018–19. We will use the results of the survey to update the university's Sustainable Transport Plan and draft a new Sustainable Transport Policy.

The university has a very small number of vehicles – the main ones in use are a small fleet of Estates & Facilities vans, which are used for deliveries and by maintenance teams. King's committed to replace the current fleet with electric vehicles in 2017–18, however, this has been delayed until 2018–19 due to the availability of the vehicles. In the meantime, low emission vehicles have been leased. Once in use, the electric vehicles will contribute to reducing air pollution around our central London campuses.

King's is an active supporter of the Business Low Emissions Neighbourhoods funded by the



Mayor of London and delivered by our local Business Improvement Districts (BIDs) which are working to improve air quality and mitigate the negative health impact of poor air quality in the Northbank (Strand campus) and Borough High Street (Guy's campus) areas.

The Environmental Research Group at King's are leading air quality experts and provide information on air pollution in London to the public, policy makers and scientists. The team now provide Transport for London with pollution forecasts, which are displayed at tube stations, bus stops, river piers and on digital signs along major roads. Transport for London suggest this can help Londoners decide how to best travel around the city when high pollution levels are forecast.

Water



Target
Reduce consumption of water by 2% annually by 2020 (cubic metres per staff/student FTE) from a 2013-14 baseline

● TARGET NOT ACHIEVED

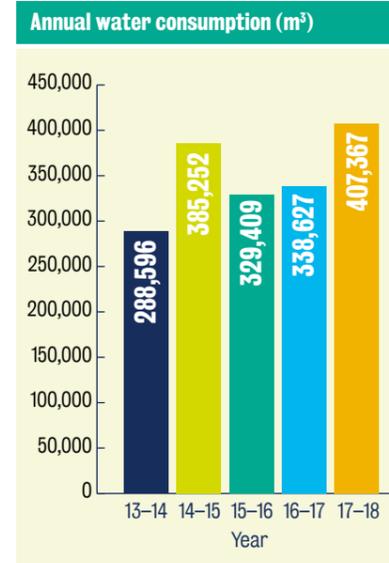
Policy

In its Environment and Sustainability Policy, King's commits to designing, operating and maintaining its facilities to ensure water efficiency across its estate. This forms part of our Sustainability Guidance for Capital Projects, which requires projects to reduce water usage by integrating water efficient plant and fittings, and to consider grey water systems such as rainwater collection and water recycling.

Progress

Water consumption continued to rise in 2017-18 despite efforts such as fitting Automated Meter Reading (AMR) meters. Absolute water consumption increased by 20%, while water consumption per FTE increased by 13% compared to last year.

We expect that part of this increase is due to inaccurate billing, as estimates are frequently used, especially at sites without AMR meters. As a result, water bills are often unreliable and show spikes in consumption when meters are checked.



Challenges and opportunities

In 2018-19, we will continue our work to install AMR meters at buildings, with the aim to use these automated readings to provide us with more accurate consumption data. King's has never implemented a targeted water reduction programme to retrofit existing water-using equipment, having focused on energy and carbon reduction. Therefore this remains an opportunity for the future.

Annual water consumption						
	Unit	2013-14	2014-15	2015-16	2016-17	2017-18
Water consumption	m ³	288,596	385,252	329,409	338,627	407,367
Student and staff numbers	FTE	28,031	28,888	30,616	32,669	34,521
Water consumption per FTE	m ³	10.3	13.3	10.8	10.4	11.8
Target water consumption per FTE	m ³	10.3	10.1	9.9	9.7	9.5
University income	£000	603,668	684,225	738,286	778,150	841,030
Water consumption per £000 income	m ³	0.48	0.56	0.45	0.44	0.48
Space NIA*	m ²	218,683	236,985	247,440	252,452	250,191
Water consumption per m ² NIA*	m ³	1.32	1.63	1.33	1.34	1.63

*Net internal area

Waste and recycling



Targets
Achieve 60% recycling by weight of office and residential waste

● PROGRESS TOWARDS TARGET

Establish baseline for total annual operational waste produced by the university

● TARGET ACHIEVED/ON TRACK

Maintain zero non-hazardous waste to landfill

● PROGRESS TOWARDS TARGET

Policy

The university's Waste Management Policy, approved in June 2017, sets out our commitments and objectives regarding sustainable waste management. King's is committed to following the waste hierarchy of 'Reduce, Reuse, Recycle', prioritising reducing waste, reusing items and recycling wherever possible over generating energy from waste. Our recycling target in 2017-18 was 60% of non-hazardous operational waste, rising to 65% by July 2019 and 70% by July 2020. We are also committed to sending zero non-hazardous waste to landfill.

Progress

We have made significant progress in improving our waste management across the university in 2017-18.

A new waste contractor took over collections from all campuses on a rolling basis, with Strand Campus being the last to fully move to the new service in April 2018. As part of the new contract, we now receive monthly waste reports which give us weight data of our operational waste streams. This has enabled us to track our recycling rate throughout the year, and establish a baseline of waste to monitor our waste reduction. Regular reporting has also made it possible to compare campuses, and target improvements at sites that showed low recycling rates. Through the appointment of a Waste to Resource Project Coordinator, in post since August 2017, we have also been able to dedicate more resources to monitoring performance and making improvements.

Our recycling rate has seen a significant increase in 2017-18.



Waste and recycling *(continued)*

Introducing new waste streams

In 2017-18, we introduced food waste collections in our canteens, directly managed residences and at Bush House. While food waste at most locations was previously disposed of as general waste and incinerated, it is now separated and sent to anaerobic digestion. In the anaerobic digestion plant, food waste is broken down by microorganisms. This produces fertiliser for farms and biofuel. After successfully trialing food waste at these selected locations, we will roll out collections to office kitchens across our campuses throughout 2018-19.

We also introduced a new glass waste stream. Glass can be recycled infinitely without losing its quality, and separating it from mixed recycling ensures its quality is maintained. Our new waste contractor collects the glass, and then further separates it by colour to ensure it can be recycled into new bottles and jars. Glass waste bins are now available in residences and to catering and events teams, and special collections from offices can be requested.

Data shows that both waste streams have been widely used throughout the year, and this is helping us to better manage our waste and increase our recycling rates.



In August 2017, our recycling rate at King's-managed sites was 37%, with our overall recycling rate, which includes buildings managed by Bouygues and Guy's and St Thomas' NHS Foundation Trust (GSTT), at 39%. This was the first month of collections at all King's-managed sites except Strand to have been moved to the new service, and therefore our first month of accurate data. After making improvements throughout the year, our recycling rates in July 2018 were 57% and 56% respectively. While this was short of our target of 60%, it is a significant improvement and puts us on track to achieve our target of recycling 65% of non-hazardous operational waste in 2018-19.

After a successful trial of Hubbub's 'Square Mile Challenge' coffee cup recycling campaign at the Maughan

Library, King's has worked with Simply Cups to roll coffee cup recycling out across all campuses, including buildings managed by Bouygues. Coffee cup bins can now be found in receptions and near all coffee outlets, encouraging staff, students and visitors to recycle their disposable cups. While disposable coffee cups cannot be recycled in conventional paper mills, our contractor Simply Cups uses a process which mixes the cups with recycled plastic, creating a new material that can be used for items such as pens, reusable coffee cups, and even park benches. In 2017-18, King's recycled 591 kg of coffee cups, which is an estimated 50,000 cups.

Use of our internal reuse system Warp It continued to grow in 2017-18, saving £96k and 41 tonnes of CO₂. This is a significant increase from £36k and 13 tonnes of CO₂ saved

in 2016-17 and is the result of an ever-growing number of users and increased use of Warp It by project and campus managers. An outstanding example of internal reuse is the Denmark Hill Campus Operations Team, who have championed Warp It at Denmark Hill. The new Campus Operations office is furnished with chairs, desks, tables and cabinets from Warp It, the carpet was repurposed from a different building, and even the paint on the walls was left over from a previous project.

Challenges and opportunities

Our average recycling rate for all sites in 2017-18 was 47%. Despite significant improvements in waste management in 2017-18, we have not met our recycling target of 60% recycling by July 2018. However, recycling rates show great



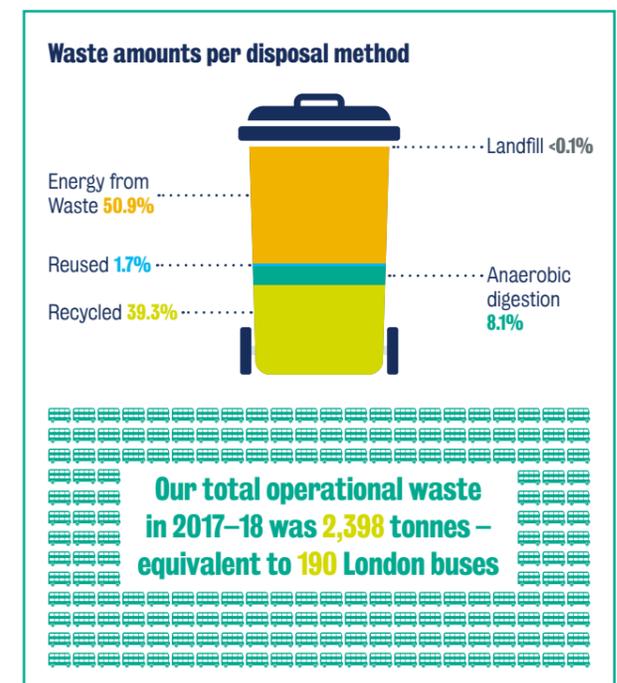
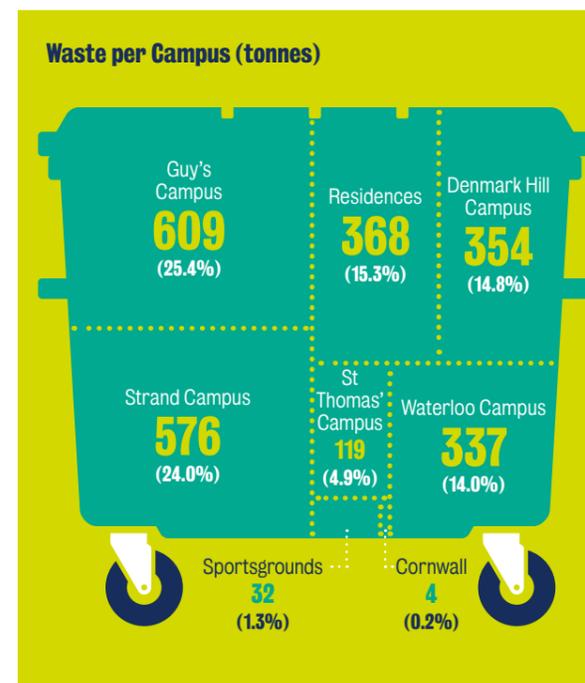
Reduce Waste Week

In May 2018, King's held its first Reduce Waste Week. Aimed at promoting the 'Reduce, Reuse, Recycle' hierarchy, the week highlighted the importance of waste reduction. Each day, the Sustainability team held an information stall with games at various campuses, speaking to students, staff and visitors. Other events included a zero-waste toiletries workshop, in which students made their own face scrub with coffee grounds given by King's Food, and a 'disco soup' which saw students, King's College London Students' Union (KCLSU) and the Sustainability team cooking a meal out of leftover produce from Borough Market.

improvement from 39% in August 2017 to 56% in July 2018. With planned further improvements, such as the roll-out of food waste to office kitchens, we will further increase our recycling rates in 2018-19.

While we have achieved zero to landfill for office waste, a small quantity of bulky waste was sent to landfill in 2017-18. This came to 0.01% of our total operational waste. We will work on ensuring no non-hazardous waste is sent to landfill in 2018-19.

Improved data from our new suppliers has meant that we have been able to set a baseline for weight of waste produced across King's, which will allow us to set waste reduction targets in the future. Improved granular data also means that we are able to focus on areas with low recycling rates to identify improvement actions and have maximum impact.



Supply chain and sustainable food



Supply chain

Target
Achieve Level 4 of the Flexible Framework
● PROGRESS TOWARDS TARGET

Policy

The university's Procurement Statement on Corporate Social Responsibility suggests that while supplier selection should be based on overall value for money in accordance with the Financial Regulations, preference should be given to suppliers who comply with a range of social and sustainability principles. This means that staff purchasing goods and services are asked to consider environmental, social and economic factors.

Progress

King's has continued to work towards achieving Level 4 of the Flexible Framework in 2017-18, aiming to achieve this in 2018-19. The Flexible

Framework is a self-assessment mechanism, helping us to measure and monitor our progress on sustainable procurement. In September 2017, the Sustainability Team organised a training session on responsible procurement attended by all Procurement staff. The session was run by NETPositive, a consultancy focused on maximising organisations' positive impacts, and trained the Procurement team in what responsible procurement is and how to score suppliers on their social and environmental impacts.

We continue to use framework agreements through purchasing consortiums, which often include sustainability questions within their evaluation processes. King's also embeds sustainability criteria in many of our tender requirements and new contracts.

In July 2018, King's became accredited as a Living Wage Employer. This means that all King's staff, including our onsite service contractors, are paid at least the London Living Wage. While King's has been committed to paying all staff and onsite contractors the London Living Wage since 2014, applying for and receiving this accreditation is an important step towards social mobility, widening participation, and commitment to Service: one of the university's five strategic priorities.

Challenges and opportunities

In 2018-19, we will work to produce a new Sustainable Procurement Policy, setting out the university's commitments to socially and environmentally responsible purchasing.

As part of our scope 3 carbon footprint, which includes indirect carbon emissions, King's reports on carbon emissions from its supply chain. While data on procurement at King's is available, classification of different products and services is often inaccurate, resulting in the need to estimate carbon emissions. A new finance system is to be introduced for 2018-19, and this will make it easier for users to classify the goods or services purchased. It is expected that this will improve accuracy in reporting our scope 3 carbon emissions.



Sustainable food

Target
Retain Fairtrade University accreditation
● TARGET ACHIEVED/ON TRACK

Attain membership of the Sustainable Restaurant Association's Food Made Good programme
● TARGET ACHIEVED/ON TRACK

Policy

Our Sustainable Food Policy commits King's to providing sustainable and healthy food to the university community, while addressing environmental and social impacts of its catering and hospitality operations. In addition, King's and KCLSU are co-signatories of a Fairtrade Policy, which commits the university and students' union to supporting and promoting Fairtrade products and campaigns at the university.

Progress

In August 2017, King's achieved the Fairtrade University accreditation. Throughout 2017-18, we continued to work towards retaining our accreditation. During Fairtrade Fortnight in March, we welcomed a Fairtrade coffee farmer for a talk on the difference buying Fairtrade can make.

Our Fairtrade and Sustainable Food Steering Group met once a quarter, and increased student interest and attendance saw engaging debates and discussions around issues such as food waste and palm oil. As a result of the group discussions, King's will work on a public statement on its policy on palm oil in 2018-19.



Two student volunteers have been central to supporting King's Food, the university's in-house catering team, in completing the Sustainable Restaurant Association's (SRA) Food Made Good assessment. The SRA's framework rests on the three pillars of Sourcing, Society and Environment, encompassing a range of sustainability issues. For the work completed throughout 2018, King's Food received one star from the SRA in January 2019. With a score of 59%, we will now work towards gaining two stars over the next year.

King's Food have also worked on reducing disposables. Catering orders are delivered with crockery and reusable glass bottles as standard where possible. They have introduced a new policy of removing plastic straws, and now only use paper straws.



During Reduce Waste Week, King's Food announced it was doubling its discount for using reusable coffee cups to 20p. King's also partnered with the #OneLess campaign, launching King's-branded reusable water bottles for sale in cafés, and mapping water fountains on the King's App. In recognition of these efforts, King's Food was nominated in the "Sustainability" category at The University Caterers Organisation's (TUCO) awards, as well as a finalist in the "Campus Health, Food and Drink" category at the Green Gown UK awards.

Challenges and opportunities

Along with the rating, the SRA provided King's with an action plan on how to further improve sustainability in our catering operations. Actions suggested include serving more vegetables and better meat, serving more sustainably sourced fish, and including more healthy options on menus.

In the next academic year, the Fairtrade University scheme is undergoing a change in collaboration with the National Union of Students

(NUS) to push universities towards further action on Fairtrade. King's has signed up to the new scheme, and will begin work towards the new accreditation in 2018-19.

King's Food have also announced the opening of their first 100% plant-based café at Bush House, which opened its doors to students and staff in September 2018.

Tackling food waste

To reduce the amount of food wasted on campus, King's Food have implemented a number of processes into their operations.

Chefs use processes such as batch-cooking of dishes according to demand, and cooking certain meals to order to avoid creating leftover meals that would be wasted.

To reduce the amount of sandwiches past their sell-by date that are thrown away, King's Food introduced the 50@50 scheme in 2017-18. As part of the scheme, packaged sandwiches close to their sell-by date are sold at a discount of 50%, 50 minutes before closing time.

Biodiversity



Target
Develop Biodiversity Action Plan for the whole estate

● TARGET ACHIEVED/ON TRACK

Policy

Through its Environment and Sustainability Policy, King's is committed to maintaining the grounds and buildings of the estate in an environmentally sensitive way to cultivate biodiversity. Our forthcoming Biodiversity Action Plan will help us to achieve this, as well as go beyond the policy to take action to improve our grounds and buildings for biodiversity rather than simply maintaining them.

Progress

In 2017-18, we made significant progress towards developing a Biodiversity Action Plan for the university.

We convened our first Biodiversity Working Group, which included campus operations staff, our

landscaping contractors, and student representatives. Once the Biodiversity Action Plan has been published, this group will oversee its implementation and share best practice from campuses.

We chose the London Wildlife Trust, the only charity dedicated solely to protecting the capital's wildlife and wild spaces, to work on the Biodiversity Action Plan with us. Throughout spring and early summer, we arranged visits to all our campuses with a London Wildlife Trust ecologist, assessing the space's potential for biodiversity and wildlife. From this, we gained a greater understanding of the wildlife our campuses could be home to. Each campus was given a list of recommendations for embedding biodiversity into the fabric of buildings and grounds, and these recommendations will form the basis of tracking progress on the Biodiversity Action Plan.

The recommendations range from small actions such as planting bee-friendly flowers around the invertebrate habitat at Guy's Campus, to larger infrastructure projects as well as projects such as including biodiversity measures in the university's landscaping contract.

Challenges and opportunities

In 2018-19, we will publish the Biodiversity Action Plan, and engage students and staff on the biodiversity improvements they would like to see on campus. We will reconvene the Biodiversity Working Group to enable sharing and engagement on biodiversity between campuses, and work with campus operations to develop targets for their campuses.

Biodiversity at the sportsgrounds

While King's campuses are often associated with central London and an urban environment, our sportsgrounds have the potential to be wildlife havens.

In particular New Malden, which is located next to the Hogsmill Valley nature reserve, has incorporated several biodiversity features into its grounds. The grounds manager has encouraged groundkeepers to leave edges bordering the nature reserve unmown, and installed bird and owl nesting boxes. In some areas, dense vegetation and shrubbery provides a buffer to the nature reserve. Hedgehogs and several species of bats have been found within 1km of all three sportsgrounds, and the suggestions provided by the London Wildlife Trust will help us to improve our grounds' biodiversity further in 2018-19.



Leadership and governance



Target:
Maintain ISO14001:2015 accreditation for all Estates & Facilities directly managed sites

● TARGET ACHIEVED/ON TRACK

Maintain environmental pollution incident rate of zero

● TARGET ACHIEVED/ON TRACK

Progress

In June 2018, our annual external audit confirmed the ISO14001:2015 certification for our Environmental Management System. Continuous improvement is core to this certification, and over the next year we will review our internal audit schedule to make it more effective.

In July 2018, King's launched its Service Strategy. The Service Strategy lays out a framework for delivering the university's commitment to society beyond the traditional roles of education and research. The idea of



'Service' is embedded as one of the five priorities to deliver the King's Strategic Vision 2029, aiming to make the world a better place by serving the needs and aspirations of society, both in our individual capacities and together as the community of King's.

Environmental sustainability has been embedded into the Service Strategy as part of the definition of "Serve", recognising that it is our responsibility to society to preserve our natural resources. In particular, the annual King's Sustainability Awards have been recognised as a celebration of

staff and student contributions to environmental sustainability.

Challenges and opportunities

We continue to undertake regular internal audits, which identify improvement actions that are followed up on and carried out by teams across the university.

The Sustainability team will continue to work with the Service team to ensure environmental sustainability remains embedded into Service activities.

Construction and refurbishment



Target
BREEAM Assessments to be carried out on all new buildings / refurbishments as required by planning

● TARGET ACHIEVED/ON TRACK

Implement Soft Landings procedure

● TARGET NOT ACHIEVED

Policy

The Environment and Sustainability Policy commits King's to design, operate and maintain environmentally sustainable facilities to ensure the greatest energy and water efficiency and lowest carbon emissions that are reasonable in the circumstances. Embedding sustainability considerations into construction projects of any size is fundamental to achieving this, as well as the commitment in King's Strategic Vision 2029 to create an exceptional and sustainable estate. To support Project Managers and design teams, King's has developed its 'Sustainability Guidance – Capital Projects Brief', setting out key areas to be considered. Further guidance has been created in the form of the 'Project Sustainability Checklist' to help prompt the design team to ask relevant questions at each project stage.

King's has been a member of the UK Green Building Council since February 2017 and supports their mission to radically improve the sustainability of the built environment.

Progress

No new developments commenced during the reporting period that necessitated a Building Research Establishment Environmental Assessment Method (BREEAM) assessment, however primary discussions are in motion, including at early design stages, for projects including the London Institute of Healthcare Engineering (LIHE) and the Guy's Student Village.

For the first time King's is undertaking SKA assessments, a rating methodology which assesses fit-out projects against a set of sustainability good practice criteria. This methodology is more applicable to fit-out and refurbishment projects where BREEAM is not appropriate, or where there are no material changes to the building fabric or structure. Two current projects (Advanced Therapies Centre in Guy's Tower, and the CL3 laboratory in Hodgkin Building 5th Floor) are targeting SKA Gold. Achieving this will be challenging, however by following

the framework we will ensure opportunities to improve sustainability performance are not missed.

We have worked with the Capital Projects team on embedding sustainability into the Project Managers' handbook and processes and will be supporting them in the development of improved soft landing procedures directly informed by recent 'lessons learned' reviews. The creation of the Project Sustainability Checklist, including 'design stage' sign off points for each Royal Institute of British Architects (RIBA) design stage, has supported delivery Project Managers with their ongoing delivery of improved sustainability standards.

Challenges and opportunities

A review has been undertaken to update and ensure sustainability requirements are included in our standard procurement documentation. A challenge is ensuring that contractors, and their sub-contractors, fully understand and implement King's expectations and requirements on sustainability.

Where sustainable products or services are not specified contractually, they are often underutilised, or ignored. We are working with Procurement to improve King's contractual position as well as assurance measures to certify these benefits are fully achieved.

With many smaller campus refurbishment and asset improvement projects happening across the estate and recognising that the impact of small projects adds up, we are continuing to work on improving processes to embed sustainability into all small projects that won't be carrying out a SKA or BREEAM assessment.



Case Study: Embedding wellbeing into the design

The project to create a new KCLSU Student Lounge project at the Institute of Psychiatry, Psychology and Neuroscience included sustainability right from the very start. Not only are environmental impacts reduced with efficient appliances and lighting, but the wellbeing of those using the space has been top of the agenda. An initial review was carried out against the WELL Building framework, and while it wasn't suitable to undertake formal assessment, certain aspects have been adopted. For example, consideration has been given to maximising outdoor views and 'bringing the outdoor in', ensuring access to drinking water, using low-VOC paints and floor/wall coverings where possible, and recycling insulation board by reusing it onsite as acoustic protection.

The outside space has been designed with inspiration from a King's-led research project, Urban Mind, which seeks to understand how different aspects of the urban environment affect mental wellbeing. The courtyard will include soft landscaping with native grasses, bulbs and perennials chosen for their use in traditional medicine, a calming water feature, and aromatic herbs and flowers will provide year-round interest and wildlife opportunities. Landscaping includes a mixture of flexible seating, open areas, and more private tranquil spots to allow moments of calm. Providing opportunities to re-connect with nature through all our senses could help mitigate the negative impacts city living has on our wellbeing.



Engagement



Target
1,000 hours of opportunities for students

● PROGRESS TOWARDS TARGET

Maintain Sustainability Champions programme to engage wider university

● TARGET ACHIEVED/ON TRACK

Policy

The Environment and Sustainability Policy commits King's to promoting environmental management by increasing the awareness of environmental responsibilities amongst staff and students. We are also committed to supporting students who would like to develop sustainability skills.

Progress

Throughout the year, opportunities were available for students and staff to get involved in sustainability at King's.

Our successful Sustainability Champions programme saw its fourth year of empowering teams across the university to get involved in sustainability. The scheme is aligned to the national NUS Green Impact scheme, and is open to staff in offices and laboratories who wish to embed sustainability into their department. In 2017-18, 46 teams were awarded 16 Bronze, 12 Silver, 1 Working towards Gold and 17 Gold Awards. After successfully piloting the new Gold Award for Office teams in 2016-17, 10 Office teams were awarded Gold this year. This requires Office teams to develop a Gold Action Plan for their area, focusing on where

they can have the greatest impact on sustainability. An example of the actions taken can be seen in the case study on the Library Champions.

All new Estates & Facilities staff, including contractors, attend the Fit for King's training programme. As part of this, they are required to attend a one-hour training session on sustainability, giving them an overview of why sustainability matters, what King's is doing to be more sustainable, and what their responsibilities for sustainability are. In 2017-18, 204 new staff members completed the sustainability session.

King's students volunteered 267 hours in 2017-18. This included training as Student Switch Off Ambassadors, assisting in updating the Warp It catalogue, and supporting King's Food on their 'Food Made Good' assessment.

The King's sustainability team also delivered over 50 hours of events, including Sustainability Week, Fairtrade Fortnight, and Reduce Waste Week. Sustainability Week took place in February 2018, and saw a wide range of events from an event on careers in sustainability to a talk on how to live zero-waste. This year, many events were aimed at linking



46 Sustainability Champions Teams



26 Office Teams



20 Laboratory Teams



266 Sustainability Champions



2,270 Colleagues engaged



1,832 Actions completed



17 Gold Awards



1 Working Towards Gold Award



12 Silver Awards



16 Bronze Awards



267 Hours volunteered by students



534 Hours of opportunities for students



The Library Sustainability Champions

This year, each of the campus Libraries teams achieved the Gold Award in our Sustainability Champions scheme. While they are spread across four different campuses across London, they have worked together with sustainability as its guiding principle. They developed a comprehensive Gold Action Plan as one team, supported by their senior management team. One of their aims was to embed sustainability into all staff inductions in an engaging way. To achieve this, they created a sustainability induction video which is shown to all new staff at the Libraries. In addition, they hold at least one sustainability training session every year. They have also aimed to improve the student experience as part of their sustainability efforts, for example by holding crafts workshops and creating a clean air room in the Maughan Library. In recognition of their efforts, the Libraries Team have been Highly Commended as Sustainability Champions in the 2018 Green Gown Awards and were shortlisted for a King's Award.

students to local environmental groups and projects such as river conservation projects and community gardens.

We have also built on our relationships with the local BIDs, attending meetings on improving local air quality and looking at linking our biodiversity plans to their goals.

Staff teams from across King's have also worked on initiatives with the local community. King's is the first university with its own GoodGym run, a group of runners combining getting fit with helping the community. The King's GoodGym group, coordinated

by King's Sport, met once a week, stopping off on runs to do tasks for community organisations such as helping at a local community farm.

Challenges and opportunities

Over the next year, we hope to increase the number of projects students can volunteer on, for example by formalising Sustainability Champions Assistants as part of the Sustainability Champions programme. This enables students to learn more about sustainability in a university environment and helps them develop employability skills.

Spotlight on residences



Policy

Our four halls of residence form an essential part of life at King's, providing a home and community for thousands of students each year. As part of our estate, all environmental policies and targets apply to our residences. King's is committed to managing them in a way that promotes environmental sustainability, and aims to improve resource efficiency while increasing awareness of environmental sustainability among staff and students.

In addition to our four directly-managed residences, King's reserves spaces for King's students with third-party providers and in University of London Intercollegiate Halls. While we do not manage these halls, we aim to collect and report their carbon emissions in our annual report.

Progress

This year, we have made significant progress in managing waste and recycling at our residences. A new waste contractor was introduced during Summer 2017, giving us the opportunity to introduce food and glass recycling in the residences, as well as providing us with accurate data. Accurate data allowed us to identify issues and take direct action to remedy them, which resulted in significant improvements in recycling rates in 2017-18. In August 2017, the average recycling rate at the four directly-managed residences was 22%. After changing the ratio of recycling and general waste bins, and introducing glass and food waste recycling, the average residence recycling rate rose to 56% in July 2018. Stamford Street Apartments

in particular was recognised for its improved recycling rate in the 2018 King's Sustainability Awards after raising recycling rates from 5% to 49% over the course of the academic year.

All residences, including those managed by third-party providers, take part in the annual NUS Student Switch Off competition. Following difficulties with collecting energy data for third-party halls, we trialled a new methodology based on student engagement and recycling in 2017-18. This allowed students to score points for taking part in social media competitions, organising events, and correctly segregating their waste. 1,292 students, or 26% of residents, signed up to the campaign online, nearly doubling numbers from 2016-17. 39 students were trained as Student Switch Off Ambassadors, and 990 students took part in the national Climate Change Quizzes. In the four King's-managed residences, the campaign led to a 1.5% reduction in energy use compared to the previous year. Great Dover Street Apartments were crowned the winners of this year's Student Switch Off after reaching platinum awards in six out of eight scoring criteria.

In addition to the university-wide Student Switch Off competition,



a mini Switch Off Competition ran at Champion Hill. The newest King's-managed residence has detailed floor-level energy metering, which allowed NUS and King's to compare each floor's energy usage and reward the floor using the least energy per person. Progress on the competition and current leader boards were displayed on TV screens in the residence, reminding students of the competition.

Challenges and opportunities

While data and reporting for our directly-managed residences has improved, receiving data from third-party providers remains a challenge. This year, provision of data from third-party providers has improved significantly, but data is still not available for all halls. We will continue working towards reporting all data.

Re-Use in Residences

Every year, over 1,500 students move out of our directly managed residences. Particularly in the summer, when the academic year ends, this can lead to high volumes of waste as students may not wish to keep all of their household and personal items. To ensure that items in good condition are given a new use, King's Residences organise donation boxes and collections from Wolfson House, Champion Hill, Great Dover Street Apartments and Stamford Street Apartments. Throughout June and July, donation boxes are available in the residences, and students moving out are encouraged to donate useful items such as crockery, pans, clothes and unopened non-perishable food. Better Re-Use collect these items and distribute them to charity partners around London, benefitting our local community as well as the environment. In Summer 2018, over 3 tonnes of items were collected in the June move-outs, including over 1,300 kg of clothes, shoes and bags, 858 kg of duvets, pillows and bed linen, and 170 kg of food. 99.4% of these items were reused, while 0.6% could not be used and were disposed of via energy from waste.



Residential carbon emissions in 2017-18

Emission source	Scope	Emissions (tonnes CO ₂ e)
Gas	Scope 1	692
Electricity	Scope 2	1,622
Waste	Scope 3	8
Water supply	Scope 3	35
Wastewater treatment	Scope 3	73
Carbon emissions from Intercollegiate Halls	Scope 3	838
Carbon emissions from other third-party residences	Scope 3	2,464
Total emissions (scope 1 and 2) from directly-managed Residences		2,314 (7% of total scope 1 and 2 carbon emissions)
Total emissions (scope 1, 2 and 3) from all Residences		5,732

Spotlight on sustainable laboratories



Policy

Our Environment and Sustainability Policy commits King's to manage its activities, buildings and estates to promote environmental sustainability, and this includes the university's laboratories. Research laboratories can use 3–10 times as much energy per square meter as typical academic spaces. As a research-intensive university, a significant part of King's energy use comes from its laboratories (up to two thirds). Therefore, improving the sustainability and energy efficiency of laboratories is crucial to meeting our carbon emissions and waste targets.

Progress

Our Sustainability Champions programme has a dedicated Laboratory stream, where teams based in labs can work towards awards using a set of criteria tailored to lab environments. This year, 20 lab teams took part in the Sustainability Champions scheme, with 7 of them achieving Gold awards. In addition to this, Laboratory Champion Bernard

Freeman from the Social, Genetic & Developmental Psychiatry Centre (SGDP) labs at Denmark Hill Campus received national recognition as a finalist in the 'Sustainability Champions' category at the Green Gown Awards in November 2017. Bernard was nominated for his exceptional work in embedding sustainability into the lab, including pioneering sample tracking software to improve cold storage efficiency, and developing centralised purchasing systems to reduce deliveries and waste.

Challenges and opportunities

Laboratory waste remains a challenge, as many labs use high volumes of single-use plastic such as pipette tips and gloves. In most labs, these are currently treated as clinical waste and disposed of through high-temperature incineration. Laboratory plastic recycling has been trialled in several labs as part of the Sustainability Champions programme, but is yet to be rolled out to the wider university laboratories.

In 2018–19, several of King's Sustainable Laboratory Champions teams will take part in a pilot of the new Laboratory Efficiency Assessment Framework (LEAF). Akin to Athena Swan, it has three award levels and permits users to estimate savings (in pounds and tonnes of carbon). LEAF facilitates career development for technical staff by allowing them to evidence good practice and savings which otherwise may go unnoticed. Criteria cover areas like waste and ventilation, but also research quality. Research quality criteria are supported by UKRN (UK Reproducibility Network) in recognition that research which is reproducible is the most sustainable.



Bernard Freeman, Laboratory Manager and Sustainability Champion at the Molecular Genetics Laboratories (SGDP)

Education and public engagement

While this report focuses on the sustainability of our operations, King's also contributes to all aspects of sustainability through its research and education activities. This page highlights some examples of this contribution.



Climate Law and Governance at King's

Climate Law and Governance at King's is a research centre within the Dickson Poon School of Law, concerned with investigating and evaluating legal and governance frameworks for climate change policy across different countries, sectors and cultures. In March 2018 they co-convened a workshop on Climate Finance Law with UN Environment, and published a report titled 'Climate Finance Law: Legal Readiness for Climate Finance' authored by Dr Megan Bowman and Dr Katrien Steenmans. The centre also hosts a series of public lectures that present emerging thinking in climate law and governance. The Climate Law and Governance Reading group is a student-led initiative, and its monthly readings and group discussions provide a forum for reflective and critical interdisciplinary discussion on climate law and governance.

Urban Mind

Urban Mind is a smartphone-based app, examining how exposure to natural features in cities affects a person's mental wellbeing. It has been developed by a research team from the Department of Psychosis Studies in the Institute of Psychiatry, Psychology & Neuroscience. The research team

hope that the results from the data collected through the app will inform future urban planning and social policy aimed at improving design and health.

Global partnerships

One of King's strategic priorities is to be an international community that saves the world. To achieve this, King's aims to engage with places, ideas and people that shape the world. The university has a number of global partnerships to increase the university's international reach and enrich students' experiences. Three research projects are receiving funding from the Global Consortium for Sustainability Outcomes (GCSO), a partnership between 12 global universities that aims to implement and scale solutions to sustainability challenges. This includes the Hot Water Research Project, as well as a project looking to implement sustainable public purchasing in cities around the world. The PLuS Alliance, a partnership between Arizona State University, King's and UNSW Sydney, combines the strengths of three research universities to solve challenges around global health, social justice, sustainability and technology

and innovation. Current projects involving King's researchers include an interdisciplinary project on planning smart, healthy, accessible cities, and a project to build scientific understanding, cooperation and adaptive management opportunities in river basin governance.

King's Business School

In August 2017, King's Business School officially launched as the university's ninth faculty. Emerging out of the School of Management & Business, King's Business School's mission is to educate responsible leaders who create positive, sustainable change in business and wider society. Responsibility forms part of the King's Business School's ethos, and the School endorses the UN Principles of Responsible Management Education. Modules such as 'Business Ethics and Sustainability' form part of Business Management undergraduate courses, and the Strategy, International Management & Entrepreneurship research group looks at how corporate governance is linked to related management issues including corporate social responsibility.

PLuS ALLIANCE

ARIZONA STATE UNIVERSITY

PHOENIX

KING'S COLLEGE LONDON

LONDON

UNSW SYDNEY

SYDNEY

KPI Table

The following key performance indicators have been chosen according to our key impact areas for sustainability. Their structure follows the principles of the International Sustainability Campus Network (ISCN) and Global Universities Leaders Forum (GULF) Charter.

	Priority Topics	Target	Unit	Baseline	Baseline Year	2014–15	2015–16	2016–17	2017–18	Target Progress	Key initiatives
Our buildings and their sustainability impacts											
Resource Use	Electricity from grid	Reduce CO ₂ emissions by 43% by 2020, compared to 2005–06 baseline	kWh	68,616,841	2005–06	61,021,046	65,519,884	67,528,476	68,511,946	Positive	Energy efficiency projects such as installation of LED lights, as well as engagement campaigns such as Re-energise.
	Gas excluding CHP input		kWh	59,894,645	2005–06	53,044,335	50,806,725	50,741,375	58,071,119		Energy efficiency projects, as well as engagement campaigns such as Re-energise.
	Gas for CHP input		kWh	0	2005–06	1,941,016	5,034,160	6,178,156	2,577,437		Due to maintenance issues, the CHPs were not running at full capacity. This will be investigated in 2018–19.
	Gas oil		kWh	5,372,558	2005–06	0	297,000	39,612	240,262		Increased use of generators at Guys' Campus, as well as improved reporting.
	Heat		kWh	31,418,485	2005–06	4,753,486	8,011,243	11,253,079	10,790,913		Energy efficiency projects such as installation of LED lights, as well as engagement campaigns such as Re-energise.
	Energy (heat and electricity) generated/consumed from onsite CHP		kWh	0	2005–06	1,343,110	3,241,868	3,233,724	1,909,193		Due to maintenance issues, the CHPs were not running at full capacity. This will be investigated in 2018/19.
	Energy generated/consumed from onsite photovoltaic		kWh	0	2005–06	6,000	95,753	143,142	123,448		Not recorded accurately due to meter faults.
	Vehicle fuel		Litres	Not recorded	2005–06	3,095	8,492	8,043	9,278		Electric vehicles have not yet been received.
	Water use		Reduce water use by 2% year on year per FTE (total staff and student)	m ³	288,596	2013–14	385,252	329,409	338,627		407,367
	Water use per FTE	m ³		10.3	2013–14	13.3	10.8	10.4	11.8	No notable water saving projects in 2017–18. Automated Meter Reading meters are being installed to monitor consumption.	
Waste	Total waste (incl construction)		Tonnes	3,559	2013–14	1,206	2,864	4,322	3,246		We have improved the accuracy of our data collection, with our waste contractor now providing detailed reports. Construction waste figures are lower, as a large demolition/ construction project at Borough High Street has been completed.
	Operational waste		Tonnes	3,559	2013–14	1,174	2,641	2,434	2,398		We have improved the accuracy of our data collection, with our waste contractor now providing detailed reports on our operational waste.
	Operational recycling rate	Recycling rate of 60% by July 2018		46%	2015–16	50%, poor data quality	46%	45%	47%	Positive	Additional resources and new waste streams introduced.
Buildings Design	Sustainable building standards	BREEAM to be carried out on all new buildings and major refurbishments: new buildings to achieve "Excellent", major refurbishments to achieve "Very Good"				Maurice Wohl Clinical Neuroscience Institute assessed as "Excellent" at design stage.	Champion Hill assessed as "Outstanding" for new buildings and "Excellent" for existing building at design stage.		No BREEAM carried out for projects.	No change	No new projects in 2017–18 required BREEAM assessment, but primary discussions on upcoming projects are in motion.
Campus-wide long-term planning and target setting											
Carbon	Carbon emissions	Reduce CO ₂ emissions by 43% by 2020, compared to 2005–06 baseline	Tonnes CO ₂ e	52,389	2005–06	39,416	39,013	36,475	32,904	Positive	Energy-saving and low-carbon projects, as well as engagement campaigns.
	Carbon emissions per FTE		Tonnes CO ₂ e	2.41	2005–06	1.36	1.27	1.12	0.95		Student and staff numbers have grown while emissions have fallen.
	Carbon emissions per £ income		Tonnes CO ₂ e	0.14	2005–06	0.06	0.05	0.05	0.04		Income has increased while emissions have fallen.
Food	Fairtrade Accreditation	Achieve Fairtrade University accreditation		No	2015–16	No	No	Yes	Yes	Positive	King's maintained accreditation, and will work towards new award scheme in 2018–19.
	Sustainable Food Policy	Develop Sustainable Food Policy		No	2015–16	n/a	No	Yes	Yes	No change	Sustainable Food Policy has been renewed.
	Sustainable Restaurant Association (SRA) rating	Receive SRA star rating		No	2015–16	n/a	No	No	Yes	Positive	A rating of one star (59%) has been received for our 2018 submission.
Biodiversity	Biodiversity Action Plan	Develop university-wide Biodiversity Action Plan		No	2015–16	n/a	No	No	Yes	Positive	The Biodiversity Action Plan has been developed and is due to be published in 2018–19.
Integration of research, teaching, facilities and outreach											
Social integration	Sustainability Champions: Winning office teams	Increase sustainability awareness		14	2014–15	14	13	21	26	Positive	Numbers of teams and Champions have increased.
	Sustainability Champions: Winning laboratory teams			10	2014–15	10	15	25	20	Negative	Fewer teams, but a new programme will be trialled in 2018–19.
	Sustainability volunteering (hours volunteered by students)			195	2016–17	Not recorded	Not recorded	195	267	Positive	New student volunteering opportunities, such as supporting King's Food and the SRA rating.
	Hours of opportunities for students		1,000 hours of opportunities for students		534	2017–18	Not recorded	Not recorded	Not recorded	534	
Commitments and resources for campus sustainability	Student Switch Off engagement (students pledged support)			554	2015–16	n/a	554	679	1,292	Positive	Increased support from Residences for Student Switch Off campaign.
	ISO14001:2015	Achieve ISO14001:2015 certification for Estates & Facilities		No	2013–14	No	Partial – Strand Campus only	Yes	Yes	No change	Maintained certification after external audit in June 2018.

2018–19 Environmental sustainability targets



EMS

Maintain ISO14001 certified Environmental Management System (EMS) to continually improve environmental performance

- Maintain **ISO 14001:2015** accreditation



Water

Increase water efficiency across the estate through design and maintenance of estate

- Reduce consumption of water by **2%** each year over the 2013–2020 period (m³ per total staff and student FTE)



Waste and Resource Use

Promote responsible consumption, minimise the amount of waste produced, and maximise reuse and recycling where generation of waste cannot be prevented

- Achieve **65%** recycling by weight of total non-hazardous office and residential waste by July 2019
- Reduce **total annual operational waste** produced by the university (excluding construction)



Carbon and Energy

Maximise energy efficiency and reduce absolute greenhouse gas emissions (in line with climate science for keeping global temperature increase to a 1.5°C scenario. Aim to achieve net zero carbon by 2025 commitment)

- Reduce absolute CO₂ emissions to achieve a **43%** reduction in scope 1 and 2 carbon footprint from a 2005–06 baseline by 2020



Partnership and Community Engagement

Collaborate with other internal and external parties to promote knowledge sharing, community engagement, and to accelerate achievement of local, regional, national and global goals

- Achieve **SRA Rating** of at least one star for King's Food
- Engage with at least one **local community project** which promotes and improves the environment
- Take an active role in sector **sustainability networks** such as LUEG, EAUC, GCSO



Clean Air

Contribute to reducing air pollution and mitigating the impact of poor air quality around our campuses

- Implement at least 2 clean air initiatives recommended by Business Low Emission Neighbourhoods
- At least 75% of King's directly-controlled fleet to be zero/low emission vehicles (excluding sportsgrounds' off-road and King's Food static vehicles)
- Increase number of bicycle parking spaces across the estate



Construction and Refurbishment

Manage construction, refurbishment and post-completion occupancy of our buildings to reduce environmental impact, enhance wellbeing of building users, and minimise operating costs

- BREEAM assessments carried out on all new buildings / major refurbishments as required by planning: New builds to achieve minimum "Excellent" and major refurbishments "Very Good"
- All large-scale fit-out projects to apply King's Sustainability Guidance and checklist, or complete SKA assessment



Biodiversity

Maintain and enhance the green spaces on our campuses to support biodiversity and health and wellbeing

- Implement at least 75% of the agreed 2018–19 opportunities identified in Biodiversity Action Plan



Training and Awareness

Raise awareness of sustainability issues and provide opportunities to develop skills and knowledge

- Achieve at least 600 hours student engagement opportunities
- Achieve minimum of 60 Staff Sustainability Champion teams completing bronze, silver or gold level
- Minimum 90% of eligible Estates staff to complete Fit for Kings sustainability module within 12 months from induction

Spotlight on the Sustainable Development Goals

King's recognises that as an educator we have a responsibility to play a central and transformational role in advancing the Sustainable Development Goals (SDGs) by 2030.

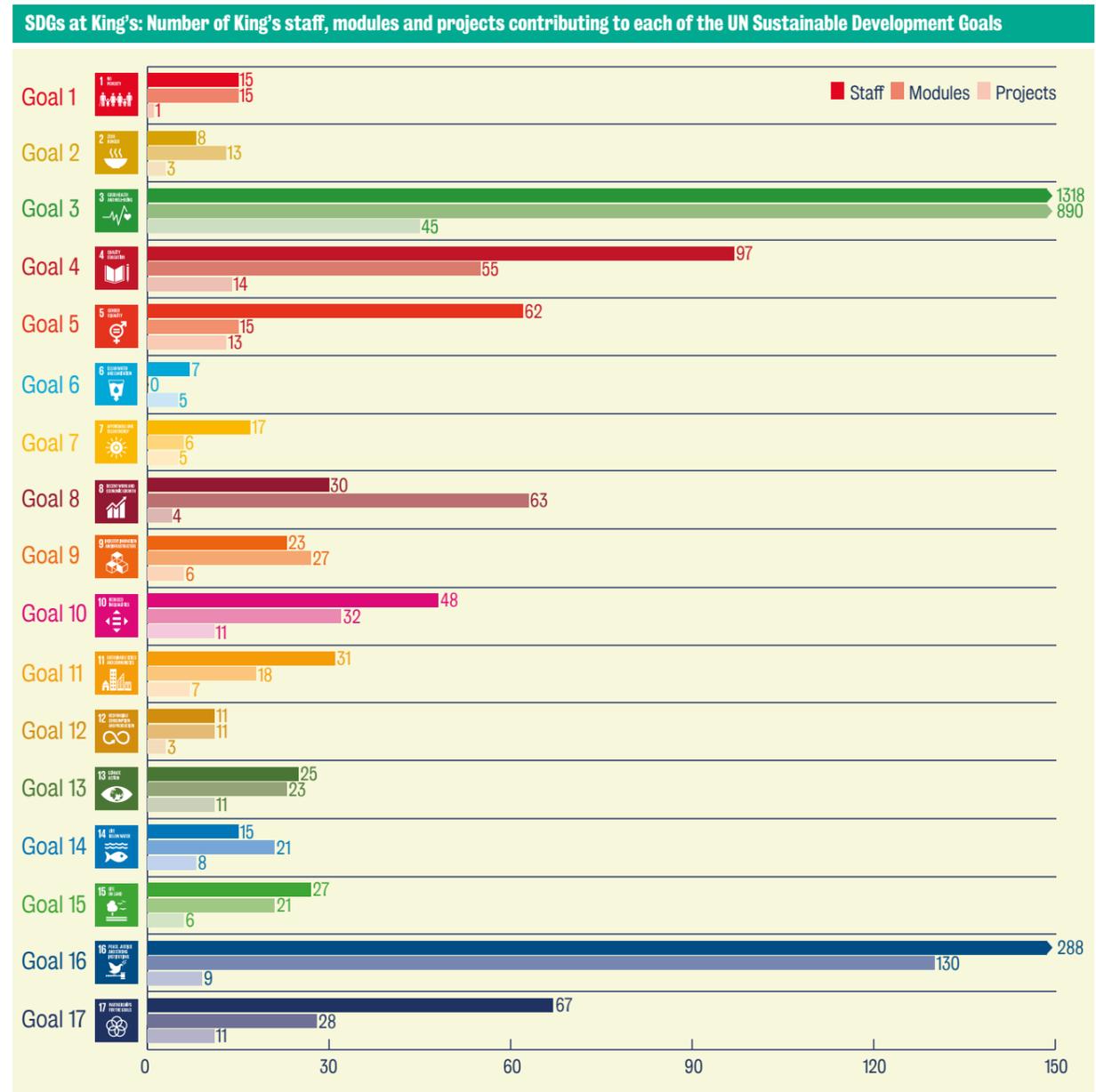
In March 2017, we undertook a baseline study to identify areas in which King's contributes to

the achievements of the SDGs by looking at projects, staff research interests and modules across King's. The results of this study are shown in the graphic below.

While we aim to repeat this study every two years, a review of modules is expected to take place in 2019. The next update will therefore be

published once the review has been completed.

In the meantime, we will work to understand the opportunities around SDGs for students and staff across King's, and will continue to embed the SDGs into our work and the wider university strategy, supported by the new Service Strategy.



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: sustainability@kcl.ac.uk



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King's Sustainability, Directorate of Estates & Facilities, 3rd Floor, 5-11 Lavington Street, SE1 0NZ

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

It's our deeds that define us