Birkbeck, University of London

Sustainability Report

2023-24

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Introduction

This report sets out Birkbeck's approach to improve our environmental sustainability as we work towards becoming a net zero organisation. It sets out where we are as we scope out the requirements for the development of a comprehensive sustainability strategy and framework to get Birkbeck to net zero on Scope 1 and 2 and Scope 3 emissions.

As part of this work, Birkbeck recognises its responsibility to act on global challenges facing humanity, including ecological degradation, climate change and growing socio-economic inequality; and we acknowledge that questions of sustainability can only be adequately addressed through tackling the root causes of inequalities, and the importance of acknowledging sustainability in policy development, strategic planning and through targeted initiatives.

Our approach will be a pathway of continual improvement, embedded in our mission and vision, with the expectation that our sustainability goals will continue to support the institution to deliver positive social, and economic outcomes as well as ecological gains.

Leadership and System Change

Birkbeck has pledged to reach net zero across scopes 1, 2, and 3 by 2050 at the latest, and will aim for as early a date as possible. We expect to publish our Energy & Carbon Management Plan (which is being developed using standardised reporting frameworks) in 2025-26 and this plan will outline our pathway to net zero with an initial focus on lower-investment, high-impact projects and embedding sustainability throughout the heart of our operations.

Summary of annual progress

Policy Statement

A new Wellcome sustainability steering group was established in 2024 to review the new Concordat requirements and the additional requirements imposed by the Wellcome Sustainability policy and to begin coordinating activity needed to meet these requirements. One of the steering group's initial actions was to publish the Birkbeck Policy Statement on Environmental Sustainability and Net Zero. This Policy Statement will be reviewed termly and updated according to ongoing changes and requirements of both the Concordat and associated Wellcome Policy and any other external and internal influences.

Heat Decarbonisation Plan published

Following receipt of grant funding from Salix under the Public Sector Decarbonisation Scheme, a new Heat Decarbonisation Plan (HDP) was completed in May 2024. The HDP sets out the actions needed to fully decarbonise the heating systems in place across Birkbeck's campuses.

Energy & Carbon Management Plan commissioned

After completion of the HDP, a new Energy & Carbon Management Plan (ECMP) was commissioned in June 2024. Following a competitive tender process, decarbonisation specialist consultancy LCMB were appointed to develop a new plan for Birkbeck to achieve net zero emissions throughout its operations. The plan will assess Birkbeck's full carbon footprint through scopes 1, 2, and 3, and will set out science-based targets to meet net zero.

Environmental Education

2023-24 saw the formation of the Environmental Education Team to take forward a project funded by two generous philanthropic donations. Its primary aim is to increase the uptake

of education in the area of environment and sustainability in order to promote engagement in, commitment to and leadership for a sustainable future. Academic Co-Direction is provided by Dr Aideen Foley, Dr Dale Mineshima-Lowe and Dr Steve Willey, with Professor Joanne Leal, Pro Vice Chancellor (Innovation and Academic Development) offering senior oversight.

An in-person summer school was held in summer 2024 for prospective students to introduce climate change and sustainability. Seminars were led by Dr Phil Hopley (School of Natural Sciences), Dr Olivia Hamlyn (Birkbeck Law School) and Prof. Muthu de Silva (Birkbeck Business School), as well as the Environmental Education team of Drs Aideen Foley, Stephen Willey, and Dale Mineshima-Lowe.

Climate Festival

Birkbeck hosted its first Climate Festival in March 2024, with organisation of the event led by Drs Stephen Willey, Aideen Foley, and Dale Mineshima-Lowe. Birkbeck's Environmental Education Team curated a cross-disciplinary event that demonstrated the variety of knowledge and perspectives required to recognise the real challenges of climate change. Further information about the Climate Festival can be found here.

Next steps

Energy & Carbon Management Plan

Publication of Birkbeck's ECMP is expected during summer of 2025. This new plan will outline our net zero targets and the short-, medium-, and long-term actions we expect to take to meet these goals. We expect the plan to recognize the changing financial landscape and outline actions covering both low- and high-investment areas.

We will publish our Energy & Carbon Management Plan on our website as soon as it is available.

Environmental Education

New programmes like BA Environment, Culture and Communication and BSc Environmental Geoscience were developed during academic year 2023-24. They will be open to applications during 2024-25 and are due to have their first intake in 2025-26, followed by BSc Environmental Science, which will have its first intake in 2026-27. Further information about our Environment and Sustainability courses can be found here.

Business Travel Policy working group

A new working group will be formed in 2024-25 with the aim of introducing a new Sustainable Business Travel Policy, which will focus on reducing Birkbeck's emissions from business travel. The working group will consist of colleagues in academic, finance, and procurement roles. Development of the policy will be ongoing through the 2024-25 academic year with any associated changes to process worked through in 25/26, with publication and implementation of the policy expected in the 2026-27 academic.

Second Climate Festival

Following the success of the first Climate Festival in March 2024, a second week-long Climate Festival is being planned for 2025. We expect to follow a similar format to the inaugural event with the aim of broadening participation across Birkbeck, the local community, and relevant organisations.

LEAF Labs and Green Disc

Birkbeck's labs will begin working towards introducing more sustainable practices in the 2024-25 academic year. We expect to follow the LEAF Labs certification from University College London in our wet labs. There will be an initial focus on any labs in receipt of Wellcome and/or CRUK funding as sustainability certification is being introduced as a funding requirement from both these bodies, with other labs expected to follow at pace. We will aim for the first round of audits to take place in Autumn 2025.

We expect to eventually carry out a similar certification in computing labs using Green Disc; however, this process will take place slightly later and is not expected to start until 2025-26.

New sustainability role

Appointment of a new full-time Sustainability Manager will take place in 2024-25. We expect the appointment to commence during Semester 1. The new role holder will lead development of the ECMP and will focus on implementation of the plan following its approval.

Environmental Impacts

As a large institution, Birkbeck recognises that some of its activities have significant impacts on the environment and has pledged to reduce these impacts by reducing its carbon footprint, energy use, waste, and water use.

Data on Birkbeck's impacts will be published annually through various channels including an annual Sustainability Report, the sustainability pages on our website, and HESA reporting. These reports will be compiled using standardised reporting frameworks.

Carbon footprint

Birkbeck's carbon footprints for the past 3 years can be seen in Table 1. For 2021-22 and 2022-23, we do not have full records available and some of our published figures were based on estimates. The year August 1st 2023 to July 31st 2024 is the first year that Birkbeck's full carbon footprint has been captured as part of the work towards producing a new Energy & Carbon Management Plan. Previously Birkbeck has focused on scope 1 and 2 and included only limited scope 3 data as required for HESA reporting purposes.

Although much of our carbon footprint is based on real data which has been verified by our suppliers, there are some areas in which we are aware we need to improve data gathering to ensure our carbon footprint is as accurate as possible.

Table 1: Birkbeck's carbon footprint

All figures in tonnes of CO2e (Aug-Jul)	**2021-22**	**2022-23**	**2023-24**
Scope 1	**749.40**	**832.81**	**858.14**
Gas use	749.40	832.81	689.04
Refrigeration & other gases (estates)			169.10
Scope 2	**1,336.00**	**1,455.90**	**1,343.84**
Grid electricity	1,299.10	1,379.90	1,233.79
District heat network	36.90	76.00	110.04
Scope 3	**586.33**	**612.97**	**5,120.47**
Suppliers			2,431.10
Business travel			877.16
Commuting (staff)			261.08
Commuting (students)			374.74
Home working (staff)			329.76
Water supply	3.40	4.60	3.47
Wastewater treatment	2.10	1.80	3.98
Waste disposal	2.10	2.80	0.85
Well to tank (WTT): gas	127.67	137.40	113.81
WTT: electricity	304.78	321.38	273.51
Transmission and distribution (T&D): electricity	116.58	115.48	109.05
WTT for T&D: electricity	27.88	25.58	23.66
Distribution: district heat network	1.82	3.93	3.04
WTT: business travel			104.49
WTT: commuting (staff)			107.79
WTT: commuting (students)			103.00
Out of scope	**0.00**	**0.00**	**198.45**
Halls of residence			41.29
International student journeys			139.95
WTT: international student journeys			17.21
Carbon offsets	**0.00**	**0.00**	**-4.00**
Study Link			-4.00
Total (tonnes of CO2e)	**2,671.73**	**2,901.68**	**7,516.89**
Change since last year	N/A	+229.96	+4,615.21

Summary of annual progress

Although our carbon footprint has increased overall due to the inclusion of further emissions-producing activities, comparing last year to this year based only on the areas included in 2022-23's carbon footprint (see Table 2) we have seen a significant decrease of 11.63% in our emissions since last year. This is largely due to a decrease in energy use across our campus between 2022-23 to 2023-24 (see Energy for details).

We have seen both gas and electricity use fall across Birkbeck's campuses, which is reflected in reductions in carbon emissions from both these areas (see Energy for further details around energy use reductions). We have also seen a decrease in use of energy from the Bloomsbury District Heat Network (DHN) used to heat the Student Central building. However, owing to the energy mix used by the DHN, emissions from this source have increased year-on-year.

Our water supply emissions have decreased slightly since last year; however, our wastewater treatment emissions have increased significantly – this is thought to be due to estimations having been used to calculate our wastewater treatment volume in the previous two years (see Water for further details).

Our carbon footprint from waste disposal has fallen by more than two-thirds. However, this is largely due to national emissions factors decreasing significantly as more of the UK's large waste disposal providers have begun moving to electric waste vehicles. Our waste volume by weight has remained consistent since 2022-23 (see Waste for further details).

Well to tank (WTT), transmission and distribution (T&D), and distribution figures are all based on our overall energy use, and as such have decreased in line with our energy use since 2022-23.

- WTT refers to the emissions produced during extraction, refining and transportation of primary fuels before their use in other processes
- T&D refers to the amount of electricity lost as it is transferred via the grid from its location of production to its end user
- Distribution refers to the heat lost while transporting heat through a heat network to its end user

Table 2: Comparative carbon footprint

All figures in tonnes of CO2e (Aug-Jul)	**2021-22**	**2022-23**	**2023-24**
Scope 1	**749.40**	**832.81**	**689.04**
Gas use	749.40	832.81	689.04
Scope 2	**1,336.00**	**1,455.90**	**1,343.84**
Grid electricity	1,299.10	1,379.90	1,233.79
District heat network	36.90	76.00	110.04
Scope 3	**586.33**	**612.97**	**531.37**
Water supply	3.40	4.60	3.47
Wastewater treatment	2.10	1.80	3.98
Waste disposal	2.10	2.80	0.85
Well to tank (WTT): gas	127.67	137.40	113.81
WTT: electricity	304.78	321.38	273.51
Transmission and distribution (T&D): electricity	116.58	115.48	109.05
WTT for T&D: electricity	27.88	25.58	23.66
Distribution: district heat network	1.82	3.93	3.04
Total (tonnes of CO2e)	**2,671.73**	**2,901.68**	**2,564.24**
Percentage change from previous year	N/A	+8.61%	-11.63%

Next steps

For 2024-25 and 2025-26, a key step will be working closely with suppliers, colleagues, and students to ensure data is comprehensive and accurate. More work is needed to better understand our scope 3 emissions.

We will be working closely with our electricity and gas suppliers to monitor consumption in 2024-25. We will be aiming to better understand why our gas consumption decreased so sharply from 2022-23 to 2023-24 and to determine whether our consumption figures from our previous supplier need further investigation. As well as working with our suppliers to monitor our overall consumption, we will begin to consider how we can improve our onsite energy metering, including switching to smart meters and how and where we should consider installing sub-meters to monitor the areas of our buildings with the highest energy consumption.

Our initial estimate of emissions from suppliers has been calculated using a model created by the University of Leeds, which allocates emissions to different products and services by spend. We expect that, in practice, our emissions from suppliers are likely to be significantly higher than the stated figure. The study was carried out by the University of

Leeds in 2021 so these figures may not 100% reflect today's processes and practices, as well as changes in the cost of living. However, they provide an excellent starting point to work from, as well as allowing for comparison with other organisations who are publishing their supplier emissions and are using the same methodology.

To begin improving these figures, in 2024-25 we will look at different ways of calculating emissions for some of our highest areas of spend. We will begin with food and drink, and for our 2024-25 carbon footprint we will use a food carbon footprint calculator provided by TUCO, our food procurement framework, to calculate the emissions produced by all food and drink purchased via this platform.

We will also begin working with construction suppliers to look at reporting on the carbon impacts of individual refurbishment and construction projects. However, as we may need to incorporate these requirements as part of the tender process, we do not expect to begin including these figures in our carbon footprint until 2025-26 at the earliest.

Business travel makes up a significant portion of our scope 3 carbon footprint. As a first step we need to improve data gathering for journeys that are purchased directly rather than booked via a travel management agency as we are currently having to rely on several assumptions and estimates to calculate this part of our business travel footprint (see Carbon Footprint Methodology Report for details). In 2024-25, we will begin creating a new Sustainable Business Travel Policy via the new working group. This will be drafted and go through consultation in 2024-25, with the aim of completing the work (including implementation work) and launching it in 2026-27.

In 2024-25, we would also like to gain a better understanding of the impacts of international student travel (i.e. the emissions produced when international students travel to and from London to attend their courses at Birkbeck) and potentially from UK students coming from outside London and the immediate surrounding area. An initial estimate of these emissions (from international students only) has been included as out-of-scope as it is unlikely that Birkbeck will be able to have any direct influence on how, and how often, international students travel to and from the UK. To address this, a survey will be issued to Birkbeck's international student community asking them to provide more accurate information about their preferred mode of transport and the number of trips they take to attend Birkbeck per academic year.

Staff commuting emissions were estimated based on the results of a survey. This saw 99 responses from colleagues (9.3% of Birkbeck's 1,060 staff) but only around 15 responses from students, meaning that while we were able to create a reasonable estimate for staff commuting emissions this was not feasible for student commuting. As a result, our

student commuting emissions figure was based on a study by neighbouring institution UCL. While this is a reasonable starting point, Birkbeck's student body are likely to behave differently to UCL's owing to the different natures of our teaching models and student populations. Therefore, this will be revisited in 2024-25 with the aim of creating a more accurate profile of Birkbeck students' commuting habits.

In 2024-25, Birkbeck will need to begin considering how it purchases and accounts for its carbon offsets. A small number of offsets have been purchased on our behalf by one of our travel providers, and some colleagues have previously purchased carbon credits via All Things Small and Green specifically to offset their business travel where sponsored by the Wellcome Trust. However, there has not previously been a formal approach taken to this and as a result only limited information is available regarding the total number of carbon offsets purchased by or on behalf of Birkbeck. We expect to undertake a formal procurement process to appoint a carbon offset provider in the future, although this will not be in place until at least 2025-26 and will feed into our sustainable business travel policy.

Energy

Birkbeck uses energy from four sources in its buildings. This includes gas and electricity purchased from providers Corona and EDF respectively via the TEC framework, energy generated onsite and used at 373 Euston Road via a rooftop PV installation, and our new Birkbeck Central building is heated via the Bloomsbury District Heat Network (DHN). Energy use figures can be seen in Table 3.

Birkbeck's gas and electricity use have both decreased since 2022-23. Our electricity use has reduced by 11.8% partly due to new LED lighting being introduced in most of our labs at Malet Street. However, it is less clear as to why our gas use has fallen more dramatically (17.2%), as no significant building fabric changes took place in this period and no gas boilers were removed from the estate.

Table 3: Birkbeck's energy use

All figures in kWh (Aug-Jul)	2021-22	2022-23	2023-24
Total gas use	4,105,232.0	4,548,227.0	3,767,279.0
Total electricity use	6,717,981.0	6,663,997.2	5,958,903.3
Electricity generated onsite (solar PV)	24,000	24,000	24,000
Total district heat network	202,395.0	415,270.0	321,392.0
Total energy use	**11,049,608**	**11,651,494.2**	**10,047,574.3**
Change since last year	N/A	601,886.20	-1,603,919.90
Percentage change since last year	N/A	+5.45%	-13.77%

Summary of annual progress

After seeing a small increase in energy use from 2021-22 to 2022-23 (to be expected owing to a full return to campus in 2022-23 following Covid lockdowns during the previous two academic years), we then saw a 13.77% overall decrease in energy use in 2023-24.

The majority of this has come from a decrease in our gas use and use of the district heat network, which saw year-on-year reductions of 17.25% and 22.61% respectively. Birkbeck's Estates and Facilities team have begun more closely monitoring use of heating across our campuses to reduce energy use, ensuring that heating is switched off overnight and that the building is heated sensibly throughout the day as required according to room bookings and timetabling. However, it is not clear if these changes can account for the full decrease in energy use as no significant changes to building fabric have taken place and the decrease in energy use appears to have coincided with a change in gas supplier in October 2023. We are working with our new gas provider to better understand why this decrease has happened.

Grid electricity saw a 10.58% decrease and electricity generated onsite stayed the same as in the previous year (based on an annual estimate). The decrease in grid electricity use can be at least partially attributed to changes to our labs, including replacing old ultra-low-temperature freezers with new, more energy-efficient models, and consolidating freezer contents where possible to use fewer freezers. A lighting project was also undertaken in all but one of our biological sciences labs, replacing old lighting with new LEDs and motion sensors.

Next steps

We will first conduct further investigation into why our energy use decreased so drastically year-on-year. While many positive actions have been implemented by the Estates and

Facilities team at Birkbeck, we want to ensure that the reduction in energy use has come from our actions and that there have been no errors in billing from either our current or previous suppliers.

To better understand the areas where we can work to reduce our energy consumption in the future, we will begin working towards improving metering across our campuses. This will begin with ensuring that all our main meters are smart meters and will then branch out into submetering in areas where we would expect to see the highest energy use, such as kitchens and labs. In 2024-25 we will begin to plan a submetering strategy to ensure improved monitoring from the 2025-26 academic year.

Waste

Birkbeck aims to recycle as much of its waste as possible and collects several hard-to-recycle waste streams to support this.

Waste streams collected at Birkbeck include:

- Recycling:
    - Plastics
    - Paper and card
    - Glass
    - Wood
    - Batteries
    - Chemical and clinical waste from labs
    - Cooking oil
    - Toner cartridges
    - Confidential waste
    - Construction waste (managed separately by construction companies)
    - WEEE (electronics and electrical waste)
- Anaerobic digestion:
    - Food waste
- Incineration:
    - General waste
    - Sanitary waste
    - Garden waste (mostly fallen leaves from Torrington Square)

Birkbeck has sent no waste to landfill for at least the past three years.

Table 4: Birkbeck's waste disposal

All figures in tonnes (Aug-Jul)	2021-22	2022-23	2023-24
Recycling	50.6	68.9	66.2
Incineration (energy from waste)	46.8	57.1	43.4
Anaerobic digestion	0.0	0.0	18.6
Landfill	0.0	0.0	0.0
Total waste, tonnes	**109.4**	**134.5**	**128.3**
Change since last year	N/A	25.10	-6.20
Percentage change since last year	N/A	+22.94%	-4.61%

Summary of annual progress

Following a lower-than-usual waste figure in 2021-22 as the UK came out of Covid lockdowns during this year, waste weights have remained relatively consistent over the past two years, with a small 4.61% decrease in waste disposal from 2022-23.

The 13.7 ton decrease in incineration (general waste) can be attributed at least partially to the 18.6- ton increase in anaerobic digestion (food waste). While our on-site cafes and restaurant have been separating food waste in their kitchens for the past several years, this has not been reflected in our annual waste reporting until 2023-24.

Next steps

Simpler Recycling legislation will be introduced in March 2025, making it mandatory for businesses to separate food waste from general waste. We expect that we will see a slight increase in waste sent to anaerobic digestion in 2024-25 as the legislation comes in more than halfway through the year, followed by a further increase in 2025-26. This should be reflected by decreases in our general waste sent to incineration. This will, however, depend on behaviour change as we will need to encourage building users to use new food waste bins correctly to avoid contamination (i.e. putting non-food waste items in food waste bins), which would lead to food waste being incinerated as general waste.

In 2026 Simpler Recycling will be expanded further to include separation of soft plastics and hard plastics (i.e. separation of plastic film from bottles, pots etc.). This will require further behaviour change from building users and additional waste stream collections across Birkbeck's sites.

A target for waste on an ongoing basis will be to reduce waste overall, rather than just focusing on recycling. This may involve looking into which circular economy practices will work for Birkbeck, such as participating in takeback or sharing schemes or eliminating

single use plastics in certain areas where it is feasible to do so. This will require a considerable amount of thought as to how it can best be introduced without impacting on day-today activities and so initial schemes are not expected to be trialled until 2025-26.

The Estates & Facilities team and labs teams will also consider and continue to investigate options for hard-to-recycle waste streams to ensure Birkbeck sends as little waste to incineration as possible.

Water

Birkbeck uses and disposes of a considerable amount of water across its campuses each year. Our figures for 2021-22 and 2022-23 were based on estimates whereas 2023-24 is based on actual consumption figures following new meters being fitted.

Table 5: Birkbeck's water supply and treatment

	2021-22	2022-23	2023-24
Water supply (m^3)	22,495.0	25,869.0	22,667.21
Change since last year	N/A	3,374.00	-3,201.79
Percentage change since last year	N/A	15.00%	-12.38%
Wastewater treatment (m^3)	7,837.0	9,054.2	7,513.05
Change since last year	N/A	1,217.20	-1,541.15
Percentage change since last year	N/A	+15.53%	-17.02%

Summary of annual progress

Owing to estimates having been used for figures prior to 2023-24, the figures given showing decreases in water supply and wastewater treatment may not be completely reflective of Birkbeck's water use prior to this year.

In 2022 and 2023 a water saving project completed by Delabie took place in men's toilets at Malet Street, with the company estimating that we could save up to 91% of water bills if we were to install similar devices across the full Birkbeck estate.

Next steps

An initial step will be to assess the best spots across Birkbeck's campuses to introduce water saving devices. This may be a long-term process due to competing priorities – while

we are aware of the need to conserve water, our water bills are only a small percent of our overall utility spend, and we need to take care not to impact day to day processes such as research in labs. We also need to carefully consider health and safety aspects, such as the risk of legionella and other water borne infections if water sits in pipes/tanks for too long.

Sustainable Infrastructure

Birkbeck recognises that decarbonisation will be challenging in several areas of its estate due to the varied nature and age of some of its buildings, as well as the conservation status placed on most buildings in the Bloomsbury area. We will aim for a sensible approach to making our buildings more sustainable, focusing on improvements to energy efficiency and building fabric in the first instance. At the same time, we will focus on other areas such as labs and digital infrastructure by participating in programmes such as LEAF Labs and Green Disc to reduce our impacts in these areas.

Summary of annual progress

A key action that took place in March 2024 was the completion of Birkbeck's Heat Decarbonisation Plan (HDP). The HDP was completed by consultancy LCMB following receipt of funding from the Low Carbon Skills Fund, a part of the Public Sector Decarbonisation Scheme. The HDP was developed to provide a strategic roadmap of how the university can replace fossil fuel-based heating systems with low carbon alternatives. It has provided Birkbeck with the relevant information to begin developing detailed project proposals to support heat decarbonisation across their estate. it will also support future grant funding applications to reduce capital expenditure for decarbonisation measures.

Next steps

In 2024, it was announced that several major research grant funding bodies, including the Wellcome Trust and Cancer Research UK, would require researchers to have attained a sustainability certification in their labs in order to receive new funding, or to continue to receive existing funding, by December 2025. To address, this, Birkbeck has decided to begin working towards the Laboratory Efficiency Assessment Framework (LEAF). LEAF is a standard set by UCL to improve the sustainability and efficiency of laboratories, with over 85 universities around the world already participating. It provides a framework that labs can use to improve their sustainability-related practices and processes and reduce their overall environmental impacts by looking at several categories including energy, water, waste, procurement, induction and ongoing training, and equipment use, among others. LEAF Labs is considered most suitable for wet labs. We will aim to complete our first round of audits for Bronze certification in at least four labs by October 2025.

Similarly, for dry (computing) labs, we will begin exploring Green Disc certification, which works on a similar basis to LEAF Labs but has been designed specifically with computing in

mind. Green Disc can be carried out separately by research groups or laboratories and by central services. Like LEAF, it helps applicants to reduce their environmental impacts by looking at their activities in several different categories. We do not expect to begin the process of Green Disc certification until later than LEAF Labs as currently none of our dry labs are in receipt or in the process of applying for grant funding from the relevant bodies.

Work started on Birkbeck's Energy & Carbon Management Plan (ECMP) in summer 2024, with consultancy LCMB beginning to calculate our carbon footprint and map out pathways to net zero according to different net zero target dates. The ECMP will, when complete, provide a set of actions that will need to be taken to reduce Birkbeck's emissions as far as possible.

Sustainable Procurement

We are aware that significant changes will need to happen within our procurement processes at Birkbeck to achieve net zero scope 3 emissions before 2050. This will include changes to procurement through all activities, particularly looking at the areas that may have the highest impacts in terms of environmental footprints such as construction, labs, and catering.

Summary of annual progress

During the academic year 2023-24 we completed some significant procurement process changes in creating an internal works framework with lots on a tiered value basis. Contractors are committed to consider the sustainability actions they will demonstrate for contracts awarded. Work for our student wellbeing lounge and at Birkbeck Central was carried out by a contractor on the Constellia framework, which includes sustainability as an award criteria.

Also in 2023-24, we awarded a contract for our Hyflex solution across classrooms to GVAV who used their supply chain with their relevant sustainability initiatives. The award criteria for our mini competition used a UKUPC framework, which included a section on sustainability that suppliers responded to with the objectives to be met accordingly.

Birkbeck procures all its food via TUCO, who provide procurement frameworks, training, and industry insights to support sustainable practices in catering. All our fruit and veg comes from Angry Monk. This company offers 'wonky veg' and surplus food to its customers, reducing the amount of produce that ends up becoming food waste.

Next steps

Birkbeck will continue to build on using sustainability as one of the quality award criteria and will use sector recognised frameworks where this is a prerequisite.

In 2024-25, as part of the LEAF Labs certification, procurement processes for lab consumables and other equipment will be considered. This may include:

- Aiming to consolidate deliveries with nearby institutions such as London School of Hygiene and Tropical Medicine and/or University College London

- Requesting life cycle assessments and/or carbon emissions produced by a particular product/service from all suppliers providing goods or services worth over £5,000
- For plastic-based products, looking for biopolymers or considering the percentage of recycled plastic used in the product and/or the recyclability of the product at disposal
- Requesting information about any waste take-back schemes provided by suppliers
- Minimising waste from all suppliers (e.g. requesting less packaging)
- Introducing reuseable items in place of single use plastics where possible

We recognise that not all these options will be possible for all items or for all suppliers, and some may take significantly longer than others to assess and implement. In 2024-25 we will begin the process of determining where to begin and which actions to take first.

Travel Emissions

As a university with a global reach, a significant amount of travel takes place within our research and academic operations each year. Birkbeck will begin by producing an estimate of the carbon impacts of its travel and work via a new group to introduce a business travel policy, which will have a key aim of promoting carbon-friendly travel.

Summary of annual progress

The year 2023-24 was the first year for which Birkbeck's business travel carbon footprint was calculated. This covers all travel on behalf of Birkbeck for professional and academic purposes (e.g. attending conferences, meetings, etc.). It does not include any commuting to and from Birkbeck's campuses. In total, Birkbeck's staff and students travelled an estimated 3.7 million kilometres, producing 831.8 tonnes of CO2e, and stayed approximately 3,320 nights in hotels and other accommodation, producing a further 48.8 tonnes of emissions. Air travel produced the vast majority of Birkbeck's business travel emissions, coming in at an estimated 97%.

Table 6: Birkbeck's business travel distances and emissions

Mode of transport	**Total kilometres travelled**	**Total emissions, tCO_2e**
Air	3,318,995.9	812.9
Bus	3,951.2	0.4
Car hire	17,818.6	3.0
Coach	14,656.7	0.4
Eurostar	3,247.5	0.1
Ferry	430.0	0.1
Metro	3,705.9	0.1
Mileage	24,288.4	4.1
Rail, international	56,273.4	0.3
Rail, UK	265,916.3	9.4
Taxi	2,599.4	0.5
TfL	2,953.2	0.1
Tram	1,148.9	0.1
Total business travel	**3,715,985.3**	**831.8**

Table 7: Birkbeck's hotel stays

Nights stayed	Total emissions, tCO_2e
3,320	45.8

This is the first time Birkbeck's business travel footprint has been investigated, so it's not possible to compare to earlier years. However, we expect in the future to be able to better assess how we are performing by comparing with other similar institutions and how they travel, and by calculating our carbon footprint using the same methodology in future years, alongside improved data gathering to reduce reliance on assumptions. While we are aware that there are some issues with our existing data, we are confident that we have established a reasonable baseline to work on improving in future years

Next steps

Owing to some gaps in data, it was necessary to use several assumptions and estimates to produce these business travel calculations. Full information about the assumptions and estimates used can be found in Birkbeck's Carbon Footprint Methodology. A first step for 2024-25 and 2025-26 will be to improve data gathering to ensure as much accuracy in reporting as possible in future carbon footprint reporting.

A new Sustainable Business Travel Policy working group will be formed and will produce a policy aimed at decreasing Birkbeck's emissions from travel. We expect the policy to go out for consultation during the 2025-26 academic year and to be introduced and implemented during the 2026-27 academic year.

The Procurement team and other interested parties will work to appoint a travel management company formally, with the aim of booking as many trips via them as possible. We expect carbon reporting from a third-party agency to be highly accurate and would reduce help to reduce reliance on assumptions. We expect the travel management company to be appointed by the end of the 2025-26 academic year.

We will also need to consider how and where to offset our carbon footprint from travel. Some research funders now expect to see costs for low-carbon travel, or for offsetting travel, included in applications. In 2024-25 we expect to begin investigating a procurement process to appoint a carbon offset provider to be in place alongside the new business travel policy in the 2025-26 academic year.

Collaborations and Partnerships

Birkbeck already has several strong partnerships in place relating to our environmental sustainability practices – for example, our ISO14001 certification, which has been held in partnership with SOAS and LSHTM since 2016, and our partnership with Legal & General to support funding for environmental education. We will continue to maintain these partnerships and seek further collaboration to improve our sustainability practices in the future.

Summary of annual progress

In 2023-24, we started implementing processes to comply with offsetting travel as required by Wellcome and several other major research grant funding bodies. This led to the development of the Business Travel Policy working group.

Throughout the year, we also monitored funder requirements for sustainability and implemented them in projects as and where required. This included a focus on the new Concordat and associated Wellcome policy. We expect to become a Concordat signatory at a later date.

Next steps

Our next ISO14001 audit is due to take place in the summer of 2025. Due to their energy intensive processes, Birkbeck's labs are expected to be an area of focus during this audit. To address, this, our labs will begin working towards introducing more sustainable practices in the 2024-25 academic year, including the LEAF Labs certification in wet labs and Green Disc in computing labs, although work towards Green Disc is expected to begin slightly later that LEAF (see Sustainable Infrastructure for details).

Sustainable Development Goals

How does Birkbeck's activity contribute to the UN's Sustainable Development Goals (SDGs)?

Please note this section is not comprehensive. It is intended to highlight some of the key research publications, projects, and events that have taken place during the 2023-24 academic year that support work towards the UN's Sustainable Development Goals

SDG 1: No poverty

Free SIM cards for Birkbeck students

Vodafone and The Access Group Foundation supported 250 Birkbeck students with free, pre-paid SIM cards. This gave students a monthly allowance of 40GB of internet and unlimited UK calls and texts to help reduce the impacts of the cost-of-living crisis.

£1000 bursary for master's courses

Birkbeck offered a £1000 bursary to students joining new daytime master's courses starting in autumn 2024. The bursary was designed to improve accessibility to Birkbeck's flexible learning model and improve choices over where, when, and how our students can study.

SDG 2: Zero hunger

Student food pantry

Birkbeck's Food Pantry, an initiative led by the Students' Union, is designed to support students who are facing financial hardship and food insecurity. It provides a range of non-perishable food items and other necessities, and its aim is to ensure students are not forced to go without essentials.

Income inequality and food prices

This seminar discussed a research paper exploring the relationship of food price shocks with inequality and the income of the poorest shares of population.

SDG 3: Good health and wellbeing

Neurodivergence and disordered eating research

New joint research from Birkbeck and King's College London explored what the neurodivergent community would like to see prioritised in future research around disordered eating. It identified two key priorities: improving clinical services and identifying causal mechanisms.

Workplace mental health research

Dr Kevin Teoh, Senior Lecturer in Birkbeck's Business School, jointly produced a new report with the Society of Occupational Medicine (SOM) and the Chartered Institute of Personnel Development (CIPD). The report that encourages more effective interventions to support employees and colleagues in managing their mental health.

Model for early detection of dementia

Researchers at Birkbeck unveiled a study called Developing an Intelligent Prediction Model for Dementia. The study offers hope for early detection of brain deterioration associated with dementia. The research was conducted by scientists from the Developmental Neurocognition Laboratory (DNL) at Birkbeck's School of Psychological Sciences.

Prevention of burnout in healthcare workers

Professor Gail Kinman and Dr Kevin Teoh co-authored a report for the Society of Occupational Medicine (SOM) providing recommendations for intervention, entitled 'Burnout in healthcare: risk factors and solutions.' This report aims to address issues around poor mental health in NHS staff and to eventually reduce the need for staff sickness absence due to burnout.

SDG 4: Quality education

Birkbeck students highly satisfied with teaching

Our students have rated 'Teaching on their Course' as the most positive part of their Birkbeck experience. 87% of final year undergraduate students expressed satisfaction in Birkbeck's teaching in their feedback for the National Student Survey (NSS).

Birkbeck wins two prestigious British training awards

The Access to Digital Skills and Careers Programme run by Birkbeck Careers and Enterprise and funded by the Access Foundation and Hg Foundation won in two categories

at the 2024 British Training Awards, an annual event celebrating exceptional contributions to learning and development.

Birkbeck in Top 5 universities for best value for money

Birkbeck scored in the top two universities in London, top five in the UK, and top 15 globally for providing value for money for students, according to February 2024 rankings data from Times Higher Education (THE).

New partnership with the Open College Network London to boost participation in HE

In November 2023, Birkbeck and Open College Network (OCN) London formed a strategic partnership with an aim to transform routes to higher education for Londoners of all ages and backgrounds. The partnership will concentrate on training to support employability and employment, the development of a green and digital skills curriculum, and will have a focus on key thought leadership and education research projects.

SDG 5: Gender equality

Birkbeck's SHaME research instigates change

Birkbeck's Sexual Harms and Medical Encounters (SHaME) research project aimed to understand the role played by medical professionals in understanding and dealing with sexual violence. The project, which took place over 6 years, culminated in March 2024.

The Role of Ethnic Concentration and Segregation on Gender Norms

This seminar discussed gender inequality in labour force participation (LFP), focusing on the particularly wide gap in the Middle East and North Africa (MENA) region. Evidence suggests that culture, norms, and religion have a crucial impact on the LFP of women. Using evidence from Turkey, Dr Aysegul Kayaoglu analysed the impact of ethnic concentration and segregation on gender norms among refugee women.

SDG 6: Clean water and sanitation

Water-saving devices fitted

An Estates-led project in partnership with Delabie significantly reduced water use in urinals at Birkbeck's Malet Street building. A trial installation of Delabie hardware demonstrated that up to 99% savings could be achieved with further installations.

SDG 7: Affordable and clean energy

Euston Road solar PV

Solar PV at Euston Road has been found to generate an estimated 24,000 kWh of electricity annually. At the minute, a basic metering system is in place on this installation. In the future, metering will be improved to measure electricity generation more accurately.

Heat Decarbonisation Plan completed

A Heat Decarbonisation Plan (HDP) was completed by LCMB on behalf of Birkbeck in June 2024, following receipt of funding from Salix's Low Carbon Skills Fund. The HDP outlines how Birkbeck will need to phase out gas heating to meet net zero in Scope 1 across its estate. The full HDP was not made publicly available; however, a shorter version is expected to be published in 2025.

SDG 8: Decent work and economic growth

Birkbeck graduates earn eighth highest graduate salaries in the UK

UK government data published in June 2024 revealed that one year after graduating, Birkbeck graduates earn the eighth highest graduate salaries in the UK and the fourth highest graduate salaries in London. Graduates from Birkbeck had an average annual salary of £32,700 in 2021-22.

4-day week trial leads to workers' hours reductions

A 4-day week leads to a better balance between work, family and personal life, according to a government-funded 4-day week pilot program in Portugal, studying over 1,000 workers. Only four companies out of 41 involved in the trial returned to a 5-day week at the end of the trial, having seen operational and employee performance improvements with a 4-day week.

SDG 9: Industry, innovation and infrastructure

Knowledge Transfer research at CIMR

Knowledge Transfer involves the sharing of knowledge, skills, and technologies between individuals, organizations, or sectors to foster innovation and collaboration. Our research

in the dynamic field of Knowledge Transfer bridges the gap between academia, innovation, and entrepreneurial practice. Our work spans topics such as:

- the role of universities in fostering innovation
- the mechanisms driving successful industry-academia partnerships
- the value of interdisciplinary collaborations in tackling societal issues

SDG 10: Reduced inequalities

Birkbeck runs Doctoral Conference for ethnic minority and mixed ethnic backgrounds

Birkbeck's first conference for those from ethnic minority and mixed ethnic backgrounds hosted 60 students. The event featured talks from doctoral researchers, training sessions at the request of Birkbeck's Diversity 100 students and a keynote talk in the evening by Professor Jason Arday (University of Cambridge).

Diversity Scholarship supports Black students in finance

Ten scholarships worth £5,000 per year each are available for Black undergraduate students via the Goldman Sachs and Birkbeck Diversity Scholarship. The scheme aims to foster greater diversity within the finance sector and related academic disciplines.

New Birkbeck report recommends support for disabled entrepreneurs and innovators

A new report by Birkbeck and Universal Inclusion, titled *Road to Wonder: barriers and opportunities to creating innovation and enterprise faced by disabled people: an exploratory study* found that significant policy changes in how the UK Government supports disabled entrepreneurs and innovators need to occur.

Birkbeck Institute for the Study of Antisemitism receives major funding boost

The Birkbeck Institute for the Study of Antisemitism (BISA), University of London received a major grant of £500,000 from the Open Society Foundations (OSF) in September 2023. The funding will enable BISA to continue its programme of research, policy and public engagement to promote a better understanding of antisemitism.

SDG 11: Sustainable cities and communities

373 Euston Road features in Open House Festival

Birkbeck's 373 Euston Road building was selected to feature in the 2023 Open House Festival. Open House features events, tours and open days of the city's most remarkable

homes, architecture and landscapes. The building has a Building Research Establishment's Environmental Assessment (BREEAM) 'Excellent' sustainability rating with features such as a rainwater harvesting system and solar photovoltaic system generating approximately 24,000 kWh of renewable electricity per year.

SDG 12: Responsible consumption and production

Unleashing economic growth through circular business models

This seminar, hosted by Prof Silvia Sedita (University of Padova) and Dr Silvia Blasi (University of Verona), investigated the impact of combining circular business models and innovation networks on economic growth. Using data collected in 2017 through a collaboration between Legambiente and the University of Padova, they empirically examined 47 Italian firms engaged in circular business practices.

Zero waste to landfill

As of 2023-24, Birkbeck has sent zero waste to landfill for 3 years. This helps to reduce our overall carbon impacts due to the way carbon emissions from waste are calculated – it items are sent to landfill the emissions they release as they degrade 'belong' to us but if waste is recycled or incinerated for energy, the emissions from those processes belong to their end user.

Anaerobic digestion

Birkbeck reported on its food waste sent to anaerobic digestion for the first time in 2023-24. Overall, 18.6 tonnes of food waste was sent to anaerobic digestion, helping to reduce the amount of general waste sent to incineration from 57.1 tonnes in 2022-23 to 43.4 tonnes in 2023-24.

SDG 13: Climate action

Energy & Carbon Management Plan

Following completion of Birkbeck's Heat Decarbonisation Plan (HDP), consultants LCMB were asked to produce a new Energy & Carbon Management Plan (ECMP) for Birkbeck. The ECMP will set out Birkbeck's pathway to becoming a net zero institution. Work began on this document in summer 2024 and it is expected to be published in summer 2025.

Birkbeck joins coalition of UK universities seeking new financial products that do not fund new fossil fuel projects

Birkbeck has joined a coalition of over 60 leading UK higher education institutions encouraging banks and asset managers to develop more environmentally friendly deposit accounts and money market funds. The group has sent financial institutions a formal request for proposals for new products that do not contribute to the financing of fossil fuel expansion.

Inaugural Climate Festival takes place

In March 2024, Birkbeck hosted its inaugural Climate Festival. The festival offered a week-long series of events and workshops, hosting external speakers including Legal & General, IHG Hotels and Resorts, The Vegan Society, People and Planet, and Little Green Footprint.

State-Owned Companies and Climate Change

This November 2023 seminar explored the role of private companies and market mechanisms in tackling climate change and facilitating the transition to a net zero economy. It outlined how some of the most polluting firms in terms of CO_2 emissions are not privately-owned companies but state-owned enterprises.

SDG 14: Life below water

The integration of legal personhood and water markets

This event discussed the recent extension of legal personhood to rivers, streams, and lakes. It presented an alternative view of the Rights of Nature, arguing that legal personhood is a flexible legal tool that is compatible with a range of other freshwater institutions designed to protect and uphold instream or environmental flow rights, including water markets.

SDG 15: Life on land

Birkbeck scientist solves age of sand dune

An in-depth study of a star dune has been conducted by scientists at Birkbeck, University of London and the University of Aberystwyth. The study revealed the internal structure and age of the dune for the first time. The research team focused on a star dune called Lala Lallia in eastern Morocco, situated within the Sahara Desert. It is 100m high and 700m

wide with radiating arms, and the researchers discovered that it was formed about 900 years ago.

SDG 16: Peace, justice, and strong institutions

Birkbeck research finds prison populations continue to rise

The updated World Prison Population List, compiled by the Institute for Crime & Justice Policy Research at Birkbeck has found that prison populations around the world have increased to 11.5 million. This means that the world prison population rate, based on United Nations estimates of national population levels, is 140 per 100,000.

Birkbeck report finds general public willing to support science-based policies

A new Birkbeck report has reviewed public perceptions on the role of science in policymaking. The research, undertaken by Birkbeck academics Dr Laszlo Horvath, Lecturer in the School of Social Sciences, and Professor Deborah Mabbett, Professor of Public Policy, indicated that the public are willing to engage with scientific content. They found policymakers who draw on scientific advice are viewed as more competent and are more trusted.

Birkbeck selected to deliver UK Parliament's only higher education module

Birkbeck University was one of 23 universities to be again selected to offer the Parliamentary Studies Module for the 2024-25 academic year. The aim of the module is to provide students with a detailed knowledge of how Parliament works in both theory and practice and is delivered in collaboration with the Houses of Parliament.

SDG 17: Partnerships for the goals

ISO14001 Environmental Management System

Since 2016, Birkbeck has held an ISO14001 certification in partnership with London School of Hygiene and Tropical Medicine and the School of African and Oriental Studies. The ISO14001 certification audits the three institutions' environmental management annually, verifying that they are all making ongoing improvements to manage and reduce their environmental impacts such as waste, energy use, and emissions, as well as maintaining safe environments for building users.

Birkbeck and Wuhan Union New Era Education Industry Co. Ltd establish new partnership

In August 2024, Birkbeck and Wuhan Union New Era Education Industry Co., Ltd signed a Memorandum of Understanding (MOU) for academic cooperation and to promote the advancement of learning through exchanges and collaboration in teaching and research.

Birkbeck partners with The Hg Foundation to boost digital skills development

In December 2023 Birkbeck announced a partnership with The Hg Foundation, a grant-giving charity with a focus on removing barriers to education and skills in technology. This collaboration aims to enhance the digital skills of Birkbeck's mature learners, preparing them for future employment opportunities in the digital and technology sectors.