



UCL

UCL Sustainability Bond Impact Report 21/22



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Introduction

UCL is a sustainability leader in the higher education sector. In 2022 alone, we ranked 7th in the University 'People and Planet' university league, 21 academics represented us in international climate negotiations at COP27 and we launched the UCL Centre for Climate Change and Sustainability Education. UCL has been driving forward sustainability practices for over a decade, with ambitious commitments, from carbon emissions reduction to increasing biodiversity and accelerating sustainable education and research.

The sustainability team are currently reviewing UCL's sustainability strategy, to ensure our commitments, set in 2019, still cover areas where we can make the most impact. This is in part due to COVID-19 slowing sustainability progress in some areas, but accelerating progress in others. As well as aiming to align the sustainability strategy more closely with UCL's new Strategic Plan (2022-27) and link to UCL's new Grand Challenge programme, as one of UCL's new 'Grand Challenges' will focus on the climate crisis. Sustainability is also pivotal to the new Estates Strategy, which focuses on better utilising UCL's estate and improving our spaces, thereby supporting delivery of our sustainability and carbon reduction commitments.

To support this crucial work, we are aiming for even higher standards of sustainability throughout our operations, construction and buildings. The UCL Sustainability Bond supports the delivery of the ambition in our Sustainability Strategy. It reinforces our commitment to sustainability and supports our role as a catalyst for sustainable change across wider society. The projects summarised in this report, fall under the 'Green Buildings' category within the Sustainability Finance Framework, our framework for the allocation of bond proceeds. This report covers the finance period from August 2021 to July 2022. The next report, due in early 2024, will cover the period August 2022 to July 2023.

In line with the previously mentioned Sustainability Finance Framework, the report has been approved by the UCL Council, which is UCL's governing body and oversees the management and administration of the University and the conduct of its affairs. It has also been reviewed by the University Management Committee (UMC) which has a key governance role in the process: to assess spend allocation, assess the projects and investments to be allocated or financed under the Framework.

Allocation of funds

Our £300 million Sustainability Bond was issued in June 2021 and proceeds from the bond are allocated to the financing of eligible projects. The main requirement for a project to be eligible within the Sustainability Finance Framework is that it must make a positive environmental or social impact against several key criteria.

Table 1 below provides the details of the UCL Bond, including the total value allocated to eligible sustainability projects through to July 2022 and the remaining proceeds to be allocated.

Bond Par	£300,000,000
Fund Size (Net Proceeds)	£290,250,000
Currency	GBP
ISIN	XS2343114331
Issuance Date	June 2021
Total Proceeds allocated to July 2022	£262,855,000
Percentage of proceeds allocated	91%

Table 1 – Details of the UCL Sustainability Bond

The projects which have been allocated in this period were identified as contributing towards the ‘Green Buildings’ category. Under this category, the Finance Framework notes that the UCL Sustainability Bond funds will be used to deliver ‘new construction projects, existing buildings and major refurbishment projects’ achieving or aiming to achieve at least one of:

- For new buildings: Construction in line with the UK Green Building Council’s (UKGBC’s) Net Zero Carbon Building Framework; BREEAM ‘Excellent’ or higher; giving due regard for life cycle value.
- For major refurbishments: Construction in line with the UK Green Building Council’s (UKGBC’s) Net Zero Carbon Building Framework; BREEAM ‘Excellent’ or higher; giving due regard for life cycle value.
- For smaller refurbishments: Construction in line with RICS SKA HE with a target assessment level of Gold.

The table below details the allocation of Sustainability Bond proceeds through the 2020/2021 and 2021/22 financial years to 31 July 2022 and the current BREEAM rating for the respective projects.

Eligible Project	Allocation of Sustainability Bond Proceeds Amount*			BREEAM Certification Rating
	FY 2021	FY 2022	Total	
Green Buildings UCL East	£44,791,000	£163,503,000	£208,294,000	Excellent (Marshgate - Interim Certification) Outstanding (Pool Street - Academic Facilities) (Interim Certification) Excellent (Pool Street Residences) (Interim Certification)
Green Buildings ION	£6,785,000	£37,286,000	£44,071,000	Outstanding (Interim Certification)
Green Buildings Oriel	£1,508,000	£764,000	£2,272,000	Excellent (Projected)
Green Buildings Pearl	£1,434,000	£1,067,000	£2,501,000	Outstanding (Final Certification)
Green Buildings Cave	£4,000	£5,713,000	£5,717,000	Excellent (Projected)
Total	£54,522,000	£208,333,000	£262,855,000	

*Note: Based on accepted UK GAAP accounting principles on the recognition of expenditure.

Management of Proceeds

The net proceeds of finance raised under the Framework is managed by UCL’s Sustainability and Finance Teams, who maintain a register tracking Sustainable Projects to which Net Proceeds are to be allocated, or have been allocated, with associated investments recorded in UCL’s financial accounting systems.

Unallocated proceeds

Pending full allocation to Sustainable Projects, UCL may use any unallocated funds for either debt repayment and/or other transactions in line with its treasury policy – which may include cash deposits, investments in money market funds or otherwise for temporary refinancing purposes.

External Review

External verification of the allocated and unallocated portions of the Net Proceeds has been provided by an external auditor and the accompanying certification is provided.

Future Allocation

For the remaining levels of spend, the expected allocation of the remaining proceeds is:

Project	FY 2022/23
UCL East	-
IoN DRI	-
Oriel	£27,395,000
Pearl	-
Cave	-
Total	£27,395,000

Frequency of Reporting

Reporting will be published at least annually until full allocation of the Net Proceeds. Any material developments, such as modification of the framework or significant changes to the portfolio allocation, will be reported appropriately in a timely manner.

Impact Reporting

Featured Projects – Green Buildings

The following section details the environmental and social features impact of each the projects against which proceeds have been allocated in this report.



UCL East

UCL East – Marshgate

UCL East – Pool Street West

**Institute of Neurology
– Dementia Research Institute
(IoN – DRI)**

Project Oriel (Joint Venture)

Pearl - CAVE

UCL East



UCL East

UCL East represents a new phase in UCL's development and an expansion of our campus to the east of London. It builds on our progressive history, positive impact, and disruptive spirit. We are bringing together UCL academics, students, local communities, and industry to solve the biggest challenges affecting people's lives and the planet – today and into the future. The first phase includes a new academic building (Marshgate) and a new mixed academic/residential building (One Pool Street). The first phase of the new UCL East campus will be fully open in 2023.



UCL East – Marshgate



UCL East – Marshgate

Status: Construction phase

The Marshgate building will feature predominantly academic uses but will also include community and engagement functions.

At the heart of the building is a central atrium that is open and accessible, helping to encourage inclusivity and community engagement, with the use of ‘Fluid Zones’ at ground and first floor level to draw people into the building. Floor space above these levels has been designed to encourage collaboration and engagement between academic uses through largely open plan and circulatory spaces.

Marshgate will house spaces for the Experiential Learning and Research Hub, the Advanced Propulsion Lab, the Manufacturing Futures Lab, the Urban and Built Environment Co-Labs, as well as the Institute of Finance and Technology and the Global Business School for Health, which will cater to leading professionals’ needs.

The Institute of Making, a multidisciplinary research club for those interested in the ‘made world’, will also occupy space on the ground and first floor levels. As will the School for Creative and Cultural Industries, which will comprise a media lab, an object-based learning laboratory, and a suite of conservation facilities.

Sustainability features

Ensuring sustainability performance that goes well beyond regulatory requirements has been a priority since the project’s inception and it has achieved an interim rating of BREEAM Excellent, with specific features including:

- Life cycle costing: planning and budgeting which accounts for the whole building life cycle.
- Energy efficiency: highly efficient building fabric; LED lighting; mechanical ventilation with heat recovery; 1200m² solar (PV) array.
- Energy/Carbon performance: 40.7% improvement over Part L Building Regulations 2013 (predicted).
- Water saving sanitary equipment.
- Focus on active transport with extensive cycle storage.
- Life cycle materials analysis focussed on reducing embodied carbon (e.g., through use of high levels of cement replacement).
- 17.3m³ of project-related timber waste saved to date (diverted to community projects).
- 99% of construction waste diverted from landfill (to date).

UCL East – One Pool Street



UCL East – One Pool Street

Status: Complete

One Pool Street opened in the Autumn term 2022, and includes a range of uses, including student accommodation, academic, retail, community and engagement uses.

The design of One Pool Street encourages innovative academic programming, as well as a range of events and activities. Performances, exhibitions, workshops and lectures contribute to a lively and creative learning atmosphere. In addition to a centre for Robotics & Autonomous Systems, it houses the Urban Room, a major public and community space, but also School for Creative and Cultural Industries spaces - namely, a Slade studio and a London Memory Workshop. Meanwhile, the Nature-Smart Centre uses the Park as a 'living lab' and the Global Disability Innovation Hub has also moved there.

The lower levels of the building also feature a range of retail and food and drink units from CH&CO to cater to both the public and UCL students and staff.

Sustainability features

The project has received interim BREEAM certification with both the academic facilities, and residential towers above, likely to achieve high 'Excellent' ratings. Some of the key features in the facility include:

- Energy efficiency: efficient building fabric for excellent thermal performance; heat recovered from shower waste water; connection to local district heating network.
- Energy/Carbon Performance: 47.74% carbon reduction over Part L Building Regulations 2013 (RIBA Stage 4 prediction).
- Healthy lifestyles: strong connections between indoors and outdoors, as well as surrounding facilities, and a range of planting to improve biodiversity around the building. Provides scope for a wide range of outdoor activities.
- Healthy building design – maximising natural daylight, indoor air quality, thermal comfort and acoustic performance.
- Water saving sanitary equipment.
- Adaptable and flexible design, allowing for the evolution of uses into the future.

Institute of Neurology – Dementia Research Institute (IoN – DRI)



Institute of Neurology – Dementia Research Institute (IoN – DRI)

Status: Construction Stage / Projected Completion: Summer 2024

This building provides a new world-class environment to fight neurological disease through the IoN-DRI programme. The centre of excellence will support 500-600 people with a 200-seat versatile seminar theatre, six new MRI scanners as well as new public spaces and a café, open to the whole community. It will be designed with patients in mind, offering bright and welcoming spaces to move away from traditional institutional design. First class conferencing facilities will be included in the building to allow the centre to host international events in dementia care and research. As well as offering a modern space for work and collaboration, the new facility will have excellent sustainability credentials.

The design of the building is forward-thinking. It has longevity and it will be able to adapt to ever-changing practices in scientific research and modern ways of science. There are some elements that will always be required, such as wet labs, but the building works will take approximately four years and it cannot be predicted where science will be when the building opens. Therefore, it is being designed to be flexible and reconfigurable. It will be very technologically advanced, and it will be cost effective and sustainable because numerous researchers will share technology, laboratories and equipment rather than each department having its own.

Respect for the environment and local community are key principles underpinning the development.

Sustainability features

The project is currently on track to achieve the highest BREEAM Outstanding rating reflecting exemplar sustainable design. Key features include:

- Energy/Carbon Performance: 19% improvement over Part L Building Regulations 2013 (predicted).
- Significant improvements to green infrastructure focussing on native and biodiverse planting whilst also increasing ecological value.
- Energy demand reduction has been prioritised through passive design analysis resulting in highly efficient building fabric as well as the addition of up to 300m² solar (PV) panels across the wider side.
- Additional energy efficiency through lighting specification; design of heating and cooling plant; and selection of lab equipment.
- Healthy environments: design for visual and thermal comfort; optimum acoustic performance; inclusion and accessibility.
- Active transport: excellent public transport access and travel planning has focussed on active transport (i.e., walking and cycling facilities). The building is required to provide 242 short and long stay cycle spaces.
- Water consumption anticipated to be 45% improvement over typical new buildings.



Project Oriel (Joint Venture)



Project Oriel (Joint Venture)

Status: Design Stage / Projected Completion: 2026

Oriel is the joint initiative between Moorfields Eye Hospital NHS Foundation Trust, the UCL Institute of Ophthalmology (IoO) and Moorfields Eye Charity that would see services move from Islington to a new, integrated centre on part of the St Pancras Hospital site in Camden.

The new facility will create a world-leading centre for advancing eye health, harnessing the expertise of the partners under one roof to enable the delivery of the highest-quality care, research and education.

Sustainability features

This project is currently aiming for a BREEAM Excellent rating with the interim assessment currently in progress. Prominent sustainability features of the project include:

- Strong circular economy/material efficiency principles focussing on: design for flexibility/adaptability, reusability and recover; minimising construction waste; waste segregation.
- Low and zero carbon technologies: air source and ground source heat pumps; solar (PV) panels.
- Energy efficiency: 27% improvement over Part L Building Regulations 2013 (predicted).
- Water efficiency: sanitary equipment; leak detection; flow control devices.
- Biodiversity net gain assessment used to plan for improvements to green infrastructure/ecological value.
- Climate change adaptation: sustainable urban drainage strategy; drought resistant planting; thermal comfort modelling.

PEARL (Person-Environment-Activity Research Laboratory)



PEARL

(Person-Environment-Activity Research Laboratory)

Status: Complete

Person-Environment-Activity Research Laboratory (PEARL) is a unique facility to explore the ways in which people interact with their environment. It is a large space – around 4,000m² and 10m high – in which life-sized environments can be simulated. For example, a railway station, high street, town square – under controlled conditions. This is to examine how people interact with the environment and other people in these types of places. The profile, type and material of the floor can be changed. It can also simulate lighting of any colour and intensity, create sound from the tiniest bird song to the most massive explosion, include other senses, such as smell, and much more. PEARL is also the first net zero carbon building in the UCL portfolio.

PEARL CAVE (Controlled Air Ventilation Environment)



PEARL CAVE

(Controlled Air Ventilation Environment)

Status: Complete

The world's first Controlled Air Ventilation Environment (CAVE) will work adjacent to PEARL and is due to open in early 2023. It will allow scientists and engineers to understand how airborne particles – including viruses and pollution – move around transport systems and buildings from airports to theatres, enabling better designs that improve our health and well-being.

Sustainability features across both PEARL and CAVE:

PEARL has achieved BREEAM Outstanding and CAVE is on track to achieve BREEAM Excellent rating. Key sustainability features of the projects include:

- Both buildings will benefit from zero carbon electricity generated by the extensive solar array on the Pearl building, supplied to Cave via the local energy network. This has already helped to make Pearl UCL's first net zero carbon building.
- Internal environment: focus on healthy materials; thermal comfort; acoustics.
- Building energy use – passive design analysis to minimise energy use intensity.
- Active travel – proximity to a range of amenities/outdoor spaces, with facilities for cyclists on site (parking, showers).
- Water saving – anticipated 40% improvement over baseline typical new buildings.