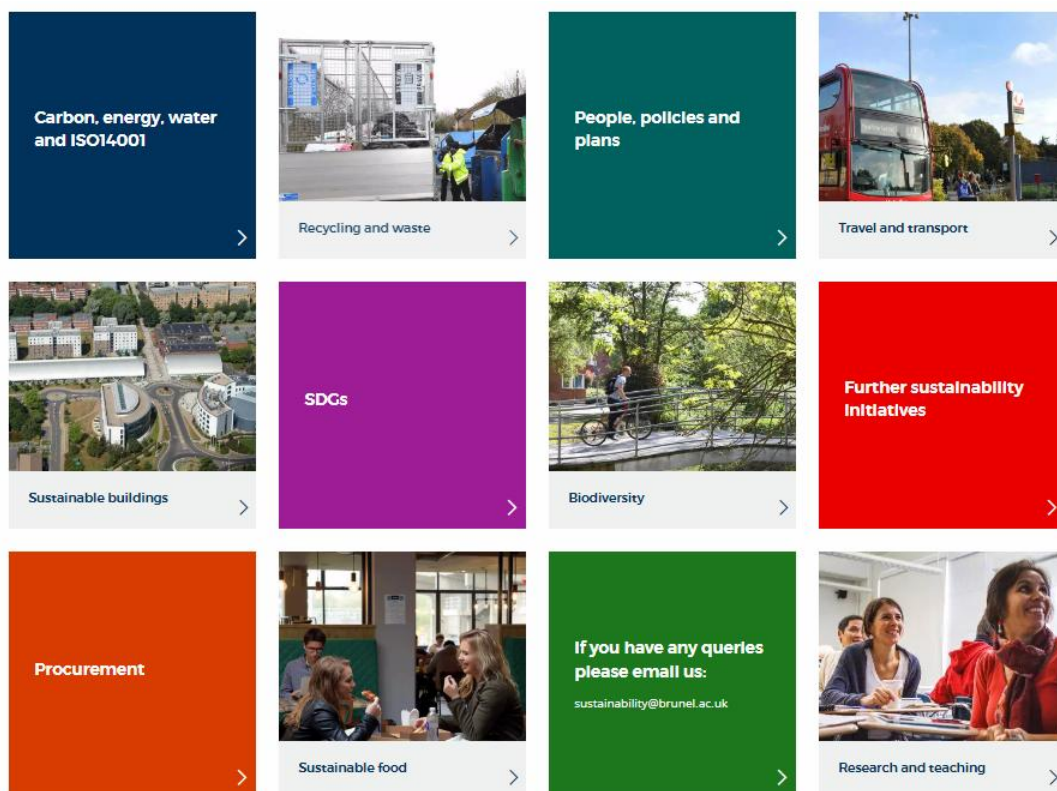


# Sustainability and the Sustainable Development Goals at Brunel University of London



[Environment and sustainability | Brunel University of London](#)

**2024**

# Our vision

Brunel University of London is a world-class research university, combining a technical focus with research excellence that is closely aligned with the needs of equitable and inclusive, environmentally sustainable global societies and economies. The final part of that vision is especially important, as our research and education are focused on preparing students for real-world challenges that they will encounter in their careers and on using our research expertise to directly address those same global issues.

As a campus-based university located within a global city, Brunel has a range of challenges and opportunities. Our campus has space for nature to thrive, with areas of woodland and meadow along with a biodiverse stream running through the estate. We attract staff and students from across the globe, and many people commute daily to our site. Ensuring that we provide sustainable travel options, support flexible working and encourage people to take individual actions that support sustainability are important elements of our approach.

The campus is a full-time home to more than 5,000 students, with almost 20,000 people studying or working on the site in any one month: we work with our catering suppliers to deliver sustainable food options and minimise waste, with our waste management company to reduce waste and maximise recycling, and with the local authority to deliver sustainable transport routes to and from the campus. Much of our estate is around 50 years old, and we have a rolling programme of improving energy efficiency and building utilisation to deliver year-on-year reductions in heat and power consumption. As a consequence, our carbon emissions are reducing in line with the university's commitment to achieve net zero by 2040.

Brunel has a long history of problem-oriented research, a substantial part of which addresses the SDGs directly. Working with businesses, government agencies and NGOs, we are delivering projects locally, nationally and internationally to reduce consumption of energy and other resources, minimise waste and improve human and environmental health. Our research has an embedded social mission, and this transfers across into our education where we deliver research-informed education to students who do not have ready access to educational opportunities. These opportunities, delivered to a uniquely diverse student body by a diverse staff, allow us to promote creativity and innovation.

Sustainability is core to our mission. We recognise that students, staff and society expect universities to be at the forefront of addressing environmental challenges and that we have to lead by example. As is true for all universities, the history of our estate influences how we operate today and the choices that we make for the future. There will always be work to be done to improve our environmental performance and to enhance the working environment for the campus community.

At all levels, Brunel University of London will remain focused on seeking opportunities to become more sustainable in our operations, to enhance the impact made by our researchers and to expand our education to promote sustainability.

**Professor Andrew Jones**

**Vice-Chancellor and President, Brunel University of London**

# Five-year delivery plan: Sustainability

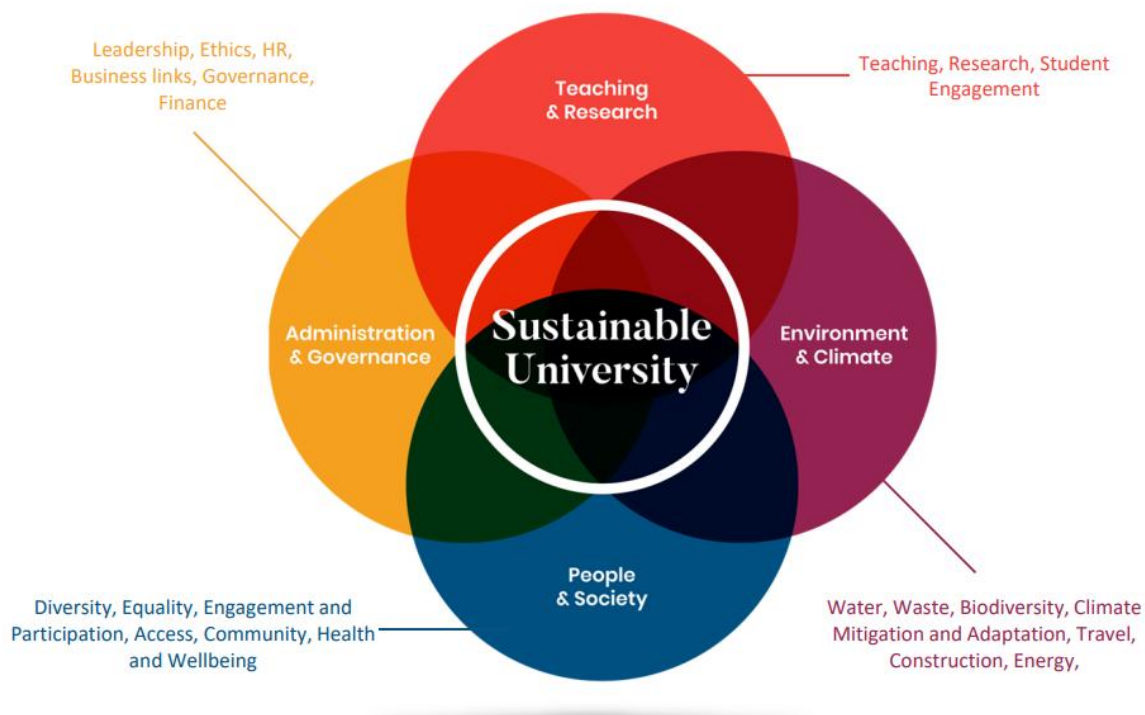
Approved May 2024

## Key performance indicators:

- Scope 1 and Scope 2 emissions reduced year-on-year (target net zero by 2040)
- Percentage of waste recycled (target 60% by 2025) [*to be revised – see p6*]
- People & Planet overall score (target >65% by 2028)
- THE Impact Ranking (top 100; University-level KPI)

## 1. Introduction

Brunel seeks to embed sustainability in our operations, teaching, research and external engagement (Figure 1). Our approach needs to be inclusive, multi-disciplinary and empowering, promoting sustainable working through everything from individual actions to collective corporate activities. Sustainability applies on campus and externally, with our global reach in teaching, research and research impact leading to wide-ranging environmental benefits and costs.



**Figure 1** UNEP Sustainable University Framework ([UNEP](#)). 'Research' here is taken to include impact.

Assessment of Brunel's contributions to sustainability requires a global approach as the impact of our education and research is delivered well beyond the campus and over long timescales. Measuring this impact and external environmental costs is challenging but the UN Sustainable Development Goals (SDGs) provide a framework for evaluating our contribution that is measured through the university-level KPI of THE Impact Ranking position. We will also monitor the QS Sustainability Rankings and will use these to enhance our sustainability performance. These QS rankings are new and may develop into an important metric.

We commit to being open, transparent and accurate in our reporting of sustainability issues and will avoid over-claiming and double-counting when assessing the impacts of our actions.

Our Environmental Management System (EMS) is ISO 14001 compliant and provides the basis for monitoring our environmental impacts, maintaining a continuous improvement focus and demonstrating our commitment to sustainability.

Brunel's **vision** is to meet "...the needs of equitable and inclusive, environmentally sustainable global societies and economies". We have exceptional international reach from our London campus, placing Brunel as one of the World's most international institutions. Our **sustainability mission** is *to support our community of students, staff and stakeholders to contribute to delivering the UN Sustainable Development Goals locally, nationally and internationally*. We will do this through embedding sustainability in our values and activities.

This plan aims to deliver elements of the university strategy, specifically through:

#### a. **Carbon management**

- Scopes 1 and 2 emissions (heat and power): target is to achieve net zero for Scopes 1 and 2 by 2040, with an interim target of attaining a 78% emissions reduction by 2035 compared to the 2009/10 baseline. Note that Scope 1 emissions include carbon-equivalents of greenhouse gases other than CO<sub>2</sub>.
  - Delivering net zero requires transforming how we deliver heat and power to the campus alongside operational efficiencies. We will develop a comprehensive Heat and Power plan that will consider energy sources, including on-campus generation; energy distribution; and infrastructure requirements.
  - Our energy management action plan (EMAP) is continuously reviewed to identify areas for improvement and the carbon costs associated with estates and other projects.
- Scope 3 emissions (supply chain, business travel): these are more difficult to measure than Scopes 1 and 2, and there remain issues with defining the limits to scope 3 that are the subject of cross-sector debate. We will use the Higher Education Supply Chain Emissions Tool (HESCET) to quantify scope 3 emissions. Scope 3 reduction targets will be set during 2024.
- Offsetting: there are different approaches to carbon offsetting, and considerable debates regarding the ethics of this approach. Ethical offsetting is possible, but care is needed in choosing where and how to invest in offsetting schemes and to ensure that their benefits are not over-estimated and that financial or environmental costs are not transferred. We will assess carbon offsetting opportunities, with a priority for those in the local region, that deliver multiple benefits in terms of sustainability.

#### b. **A sustainable campus**

Our Campus Masterplan and Estates Strategy 2023-33 outlines the vision for the campus to meet demands for accommodation, teaching, research, sports and social facilities. The campus provides a range of habitats and environments that contribute to biodiversity at local to national scales. The floodplain of the River Pinn within the campus serves as a contributor to both reducing flood risk, through the woodlands on Site 4, but also to exacerbating that risk through buildings that lie within designated flood zones (Zones 2 [0.1-1.0% probability of flooding annually] and 3 [>1% probability]). We will:

- Enhance biodiversity on campus through retaining a range of natural habitats and active management to enhance terrestrial, aquatic and avian environments. When new

construction takes place that removes habitats, we undertake to create 1.5m<sup>2</sup> of new natural or semi-natural habitat for every 1m<sup>2</sup> that is lost, and to plant 50% more trees than are removed. All new planting will be of native species. This will be guided by the green infrastructure approach outlined in *The London Plan* (GLA, 2021).

- Reduce flood risk through year-on-year reduction of the number of impermeable surfaces on the university estate. When new buildings or other hard surfaces are constructed, we will utilise permeable materials where possible. For each 1m<sup>2</sup> of new impermeable surface that is created we will remove or make fully permeable 1.5m<sup>2</sup> of impermeable ground. We will include rainwater harvesting in new building specifications.
- We will use a whole life-cycle approach to assessing the carbon impact of construction, demolition and refurbishment projects. We will follow *The London Plan's* requirements for major developments that require a minimum on-site operational carbon reduction of at least 35 per cent beyond Building Regulations. Where we cannot achieve the zero-carbon target on-site, we will utilise carbon offsetting, as outlined above.

#### c. **Sustainability education**

We aim to make Brunel a leader in sustainability in education and will embed sustainability in our teaching to ensure students learn with a sustainability lens. In order to do this, we will:

- Include and critique relevant the UN's Sustainable Development Goals (SDGs) in all new programmes.
- Ensure that students leave Brunel with a good awareness of issues of sustainability and what they can do as global citizens to promote sustainability.
- Expand our curriculum to explicitly teach sustainability related courses across the university's portfolio.

#### d. **Research and impact**

Our research contributes to sustainability directly and through its impact on society. The THE Impact rankings measure the impact of our research, and we have been able to demonstrate significant sustainability benefits from our research, including reductions in carbon emissions by major companies, progress towards circular economies in water and manufacturing, and delivery of low carbon technologies to communities in the Global South. We will:

- Support staff to undertake research that directly and indirectly addresses all aspects of sustainability.
- Deliver impact from across our research portfolio that reduces the use of energy and other resources, improves quality of life and delivers against the SDGs.
- Manage our research operations to minimise energy use and waste production, utilise laboratories, equipment and consumables efficiently, and optimise the use of travel for research purposes. A whole activity sustainability audit of the Brunel Centre for Advanced Solidification Technology (BCAST) will be used to test and refine our approach to sustainable research delivery. We will incorporate sustainability considerations into the location and design of research facilities.

#### e. **Community engagement**

The university serves as a focus for education and research in West London and sustainability provides an important strand of our community engagement. We will:

- Continue to work with the London Borough of Hillingdon on managing the campus including travel to and from the site.

- Provide opportunities for staff and students to engage with local organisations, notably Colne Valley Regional Park, in research and education, as well as to use the local environment as a recreational and wellbeing resource for our community.
- Work with community groups to assist their work to improve the local environment and to support sustainable living.

#### f. **Operating sustainably**

Sustainability includes operations and governance (Figure 1), and the People and Planet league table assesses aspects of our performance in these areas. We will continue to review our operations, including:

- Reducing our production of waste and increasing recycling rates through proactive management of procurement policies, requirements and choices of suppliers, and promotion of behavioural changes. We will during 2024 adapt our waste reduction KPI to one based on a waste hierarchy (prevention > reuse > recycling > recovery > disposal), to incentivise avoiding waste generation.
- Develop an integrated transport plan that improves the accessibility of campus using sustainable transport options, optimises the efficiency of business travel using high carbon modes of transport, and recognises the consequences of sustainable transport for our operations.
- Manage the supply of food on campus to ensure choice for consumers, affordability, sustainable production and delivery practices, and waste minimisation. There are multiple benefits to be achieved from changes to our catering and self-catered food management.
- Increase resilience of our on-campus and off-campus operations.
- Drive behavioural change through incentives and, where necessary, control. Information on working and living sustainably will be provided to the campus community and we will quantify the benefits of actions to promote positive behaviours.

## **2. Risk assessment**

There is a range of risks associated with sustainability and the university's ability to adapt to changing circumstances. While sustainability involves more than climate change, it is climate change that drives many of the most significant risks that have been identified across the sector. Climate change affects many aspects of our operation, from student recruitment through to the condition of our estate.

As outlined in the Terms of Reference, the Sustainability Strategy Committee oversees the sustainability risk register and leads on risk identification and proposal of mitigation strategies. Strategic sustainability risks will be owned by the Pro-Vice-Chancellor International & Sustainability and reported to Audit & Risk Committee and the University Council every six months.

We will:

- Manage risks to sustainability and environmental performance identified through application of ISO 14001 in accordance with the University's risk management framework. The identification, analysis, evaluation and treatment of sustainability risks within the University will be approached as an iterative and dynamic process.
- Implement and maintain processes to determine risks and opportunities, as required for ISO 14001 accreditation. These processes shall ensure that the environmental management system (EMS) can achieve its intended results and that undesirable effects are prevented or reduced. Our risk management processes, which use ISO 31000 as a framework, will embed ISO 14001 requirements.

- Assess sustainability-related risks at strategic and operational levels: risks to delivery of strategic objectives, as captured within the strategic risk register; risks to achieving institutional sustainability objectives, as captured in the sustainability risk register, and risks relating to the achievement of the targets set out in the EMS. In addition, sustainability issues will be identified as risks in other risk registers that will be cross-referenced to the sustainability risk register.
- Assess, and plan mitigation and adaptation to, the direct effects of climate change in the Estates Plan, including increased risks of flooding, extreme heat, drought and water shortages.
- Plan to increase resilience and mitigate disruptions to energy, communication and transport networks that will affect day-to-day operations and that could provide sudden shocks to student recruitment.
- Address the risk of staff and students either not committing to addressing sustainability issues or disengaging due to a belief that the university is not taking these seriously enough, through being proactive and communicating our actions clearly and frequently.

### **3. Sustainable Internationalisation**

The University's internationalisation delivery plan notes our commitment to sustainability and enhancing our environmental performance. To assess the tension between internationalisation and sustainability, the principle of continual improvement will be applied to all internationalisation activities. We will:

- Assess the environmental impacts of internationalisation as a whole and for individual initiatives, taking account of the environmental benefits that are consequences of the international work, as well as costs.
- Reduce direct negative environmental impacts through designing our activities to reduce the volume of international travel and optimise travel schedules, through improving our remote-working systems to enhance virtual meetings and collaboration, and forward planning.
- Deliver environmental mitigation and enhancement through our education and research contributing to the SDGs.
- Work with other organisations to share resources and activities, where appropriate.

Sustainability must be combined with considerations of staff well-being, and equality and diversity. Where these factors lead in different directions, we will ensure no detriment to our staff: by considering the sustainability of our international activities as a whole, any environmental costs associated with protecting staff well-being and with meeting our commitments to equality and diversity, may be at least compensated by reduced environmental costs in other activities.

# A world-leading technical university



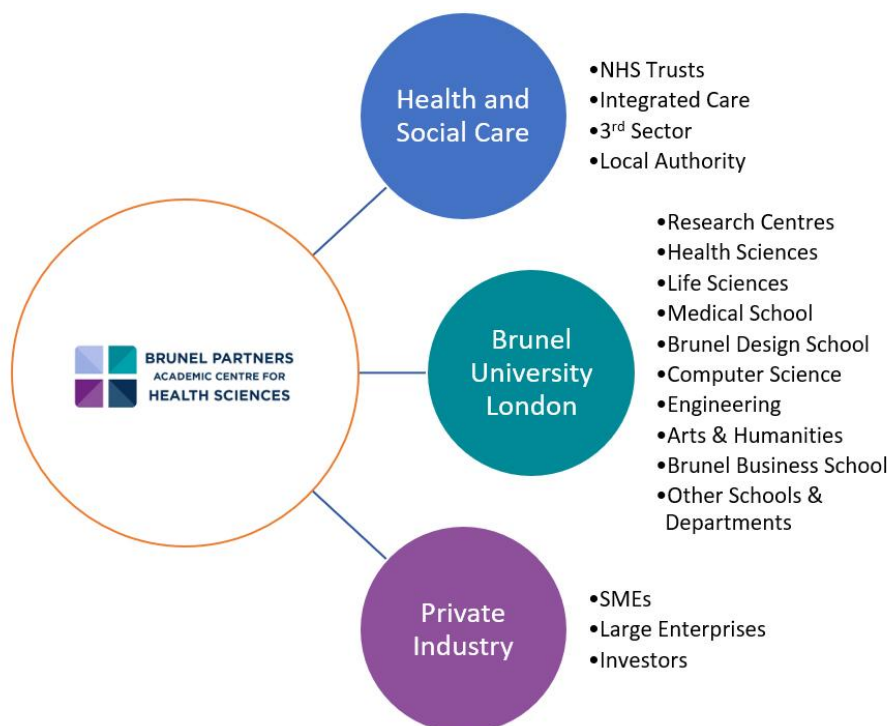
#sdg3 #sdg4 #sdg13 #sdg16 #sdg17

Brunel University of London addresses major global challenges. We deploy our technical research and knowledge creation to address major global challenges such as climate change, the circular economy and increasingly pressured healthcare systems.

We grow and align our programmes in support of our academic vision, enabling scope for even greater investment whilst ensuring [financial sustainability](#) and [environmental responsibility](#).

## Collaborative Healthcare Partnerships

Our Brunel Partners Academic Centre for Health Sciences (BPACHS) is a local collaboration that delivers stronger health links between the National Health Service and Northwest London. [The Centre's Strategy and Delivery Plan](#) considers the pressures of the current national health context. It has been developed with the intention of focussing the partners on delivery of objectives (e.g. digital health and innovation and supporting the development of patient and user involvement) which benefits all parties.





## Recognised Excellence in Graduate Employability

We are proud to be a world-leading provider of technical and employer-facing inclusive education and produce some of the most employable graduates by aligning student expectation and experience of our technically focussed education to maximise the benefits for our graduates' future lives. Our ten-week employability course, the [READY programme](#), includes lifelong measures and has a lifelong learning policy that ensures that access to these activities is accessible to all, regardless of ethnicity, religion, disability, immigration status or gender. It has received awards from the Association of Graduate Careers Advisory Services (AGCAS).

## Award-Winning Sustainable Campus



**Food Made Good:** Brunel's caterer Chartwells won a top sustainability award in **2024**.



For the seventh year running Brunel University was given the **Green Flag award** in **2023/2024**.

We pride ourselves in providing an attractive campus environment, and offer a free-thinking, creative, accessible and attractive space for all our staff and students to develop strength and depth in their research, education and enterprise.

## Powered by diversity



#sdg4 sdg#5 sdg#8 #sdg10 sdg#16 sdg#17

Brunel University of London embeds a rich understanding of our diversity and associated strengths and challenges in everything we do. We enable and champion creativity, innovation and the cultural benefits of our diversity across research, education and knowledge exchange and strive for equity for all whilst addressing challenges to our inclusivity.

We are bold in advocating the potential of our diversity and provide a unique and empowering academic and community experience for our students, staff and wider community. We provide mentoring, counselling, and peer support programmes to support students, staff, and faculty from underrepresented groups, and have a diversity and equality committee, tasked by the governing body to advise on and implement policies, programmes and trainings related to diversity, equity, inclusion and human rights on campus.

We use our many modes of educational delivery to provide equitable, accessible and international study, work opportunities and success for all our students and staff and ensure free thinking and diversity of ideas are actively encouraged and supported everywhere. As an international university, currently ranked 8<sup>th</sup> globally for International Outlook by the THE, we have global reach including delivering in-country undergraduate programmes in partnerships with two universities in China and a PhD programme with a partner in Bahrain.

Brunel's community is drawn from all parts of the world and is home to a culture that drives diversity, equity, and inclusion, and we take planned actions to recruit students, staff, and faculty from under-represented groups. 45% of the university's academic staff have a non-UK background, 39% of our postdoctoral researchers and 63% of our UK postgraduate researchers are from racially minoritised groups and 78% of our UK/EU undergraduate students are from groups under-represented in higher education. Through this diverse community, we have valuable opportunities to engage with, and be informed by, global perspectives. An example of our wide-ranging activities is the [Migration Menu](#) podcast, produced by two of our academics in Anthropology, which uses food as a vehicle to explore migration, globalisation, entrepreneurship and cultural heritage, focusing on south Asian communities in London. Our global community is also reflected in our approach to developing the

next generation of researchers who can act as change agents in a world that needs equitable and sustainable futures more than ever.

## Inclusive Learning to Address Educational Inequity

Brunel researchers from Occupational Therapy and Psychology have partnered with the NHS to deliver a project on [Addressing educational inequities through co-production of inclusive learning](#). Educational inequities based on race and ethnicity exist in the fields of Occupational Therapy and Psychology. While these inequities are well-documented, very little is known about efforts to address them and the extent of success of such interventions.

This participatory action research project evaluates the impact of efforts to address race-based educational inequities in Brunel University of London's Occupational Therapy and Psychology Divisions. Through this project, researchers identified good practices that should be continued or enhanced, as well as areas for improvement. The findings can help generate insights contributing towards reducing the race-ethnicity awarding gap in degree classifications. They are useful for educators and academic administrative leaders in the health and care professions who are actively attempting to take an anti-racist, anti-oppressive approach to learning and teaching.

### Co-producing Critical Colour-Conscious Learning Experiences in Occupational Therapy

**Brunel University London** | Future Academic Leaders Project

**NHS** | Health Education England | **CAPITAL.AHP**

Presenting Authors:  
Sydney Lai Mu-En and Teoh Jou Yin

**Background**

- AHP strategy: Co-production and anti-racism
- Epistemic dominance of Western, Educated, Industrialised, Rich, and Democratic (WEIRD) societies perpetuates health and educational inequities in Occupational Therapy
- Set up Racial and Cultural Equity (RACE) Working Group

**Methods**

**Findings**

- ✗ Exclusionary processes exacerbate existing systemic inequities
- ✗ Efforts limited only to specific individual educators.
- ✗ Colour-blind Ideology
- ✓ Case-based approach

**Outcomes**

- Formal and explicit embedded-ness into the curriculum
- Digital Accessibility
- Prioritising Preparedness for Practice and Workplace
- Incorporating opportunities for critical cross-cultural conversations into existing, already-diverse case studies

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### Occupational Therapy Students' Challenges of Prejudice and Discrimination on Placement

**Part of the Future Academic Leaders Project**

**Brunel University London** | **NHS** | Health Education England | **CAPITAL.AHP**

Presenting Authors:  
Sydney Lai Mu-En and Teoh Jou Yin

**Background**

- Subset of Findings from a larger Research Project
- AHP strategy: Co-production and anti-racism
- Epistemic dominance of Western, Educated, Industrialised, Rich, and Democratic (WEIRD) societies perpetuates health and educational inequities in Occupational Therapy

**Methods**

**Finding 1: Harassment**

Experienced or Witnessed Harassment

- From service users
- From placement educators
- From team on placement

**Finding 2: Discrimination**

Educational discrimination from placement educators resulting in feeling disadvantaged

Sub-theme: language discrimination

**Finding 3: Reporting Challenges**

- Lack of Awareness
- Fears of Victimisation

**Finding 4: Grey Areas**

**Social Exclusion**

- by team on placement

**Inaction**

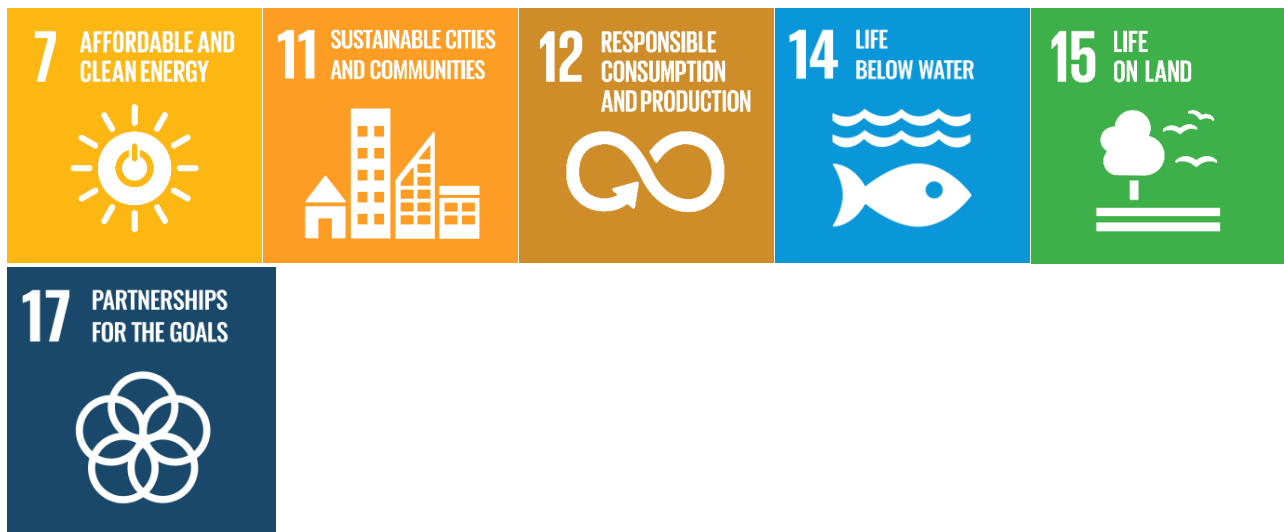
- by placement educator,
- by organisation

**Is this harassment?**

Unwanted conduct related to a relevant protected characteristic that (i) violates dignity, or (ii) create an intimidating, hostile, degrading, humiliating or offensive environment

Does not necessarily have to be intentional.

## A London campus with unparalleled global reach



#sdg7 #sdg11 #sdg12 #sdg14 #sdg15 #sdg17

Our London campus is connected locally and globally, both physically and in terms of our national and global profile. We continuously develop our campus and buildings to provide a fully accessible world-class student experience for all, adaptive and responsive to the needs of the 21st century, including a digitally enabled education, and flexibility in terms of spaces to study, work, create, relax and interact.

We ensure our approach to enhancing the campus meets the needs of our international students and the growing numbers of commuting students, as well as those living on site. We strive to meet the challenges of environmental sustainability, ranging across energy, biodiversity and the physical fabric of our buildings. In **2023/24**, our energy consumption fell by 9.4%, scopes 1 and 2 carbon emissions were down 9.2% and we used 10.1% less water than in the previous year. Alongside this, we reduced our total waste to landfill by 32.5%, and scope 3 emissions related to waste, water supply and wastewater were down by 22.3%. All these improvements represent progress towards long-term targets as we enhance our estate and work with our community to drive sustainable behaviours.

As a campus University in London with unparalleled global reach, we ensure our key transnational educational partnerships support our goals around world-class technical education and foster excellent research collaborations. Through international collaboration and research, we review comparative approaches and develop international best practice on tackling the SDGs.



## Impact of Pollution on Aquatic Biodiversity

In collaboration with Southampton University, [Brunel researchers work directly to protect fish biodiversity](#). A £355,000 grant from UKRI NERC (running from March 2023 to June 2025) looks at fish species' sensitivity to synthetic glucocorticoids, mineralocorticoids and progestins. The study, which involves 18 fish species from 14 orders, provides valuable insights into the health of aquatic ecosystems by investigating the impact of chemical pollution on fish and other aquatic species.



In collaboration with Fauna & Flora, BirdLife International, University of Cambridge, Helmholtz Institute for Functional Marine Biodiversity at the University of Oldenburg, and the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), Brunel University has established [a new 'destructive fishing' definition to kickstart fresh era in fishing policy](#). The new definition will enable the marine industry to minimise or prevent damage to the aquatic ecosystem and is an incredibly important step forward for the ocean and the sustainable livelihoods of fisheries around the world.



## Climate Action Events for COP28

In **December 2023**, Brunel hosted an interactive webinar on “Representing climate change: Problems and challenges for the 4th Estate” as part of the 2023 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC (COP 28). During the event, experts discussed the vital relationship between the mainstream media and the public understanding of climate change. This was part of the University’s local education programme on climate change risks, impacts, mitigation, adaptation, impact reduction and early warning.



To coincide with COP28, we are delighted to invite you to an interactive webinar on **“Representing climate change: Problems and challenges for the 4th Estate”**.

In this interactive online webinar the experts will discuss the vital relationship between the mainstream media and the public understanding of climate change.

The speakers will focus upon both the external obstacles facing journalists in their attempts to explain to the public the fundamental threat to humanity of climate change and the problematic ways in which the media have sought to depict activists exercising their right to civil disobedience to challenge governmental inaction on the issue.

### Speakers:

- Prof Trevor Hoey, Pro Vice-Chancellor International & Sustainability, Brunel University London
- Dr Simon Weaver, Reader in Media and Communications, Brunel University London
- Dr Anita Howarth, Senior Lecturer in Journalism, Brunel University London
- Dr Billur Ozgul, Senior Lecturer in Political Communications, Brunel University London

## Driven by a social mission



#sdg1 #sdg2 #sdg4 #sdg6 #sdg8 #sdg9 #sdg17

Brunel University of London is driven by a social mission, and we focus our world-class research on tackling the world's most pressing challenges. We deliver research-informed education to those who would not necessarily be able to access it otherwise and strengthen the impact and application of our research for societal benefit. We embed Brunel as a local engine for transformation in West London, developing deeper and stronger local impact as a civic university whilst simultaneously enabling global employment opportunities for all students to become the next generation of international leaders and change-makers.

Brunel is situated in a vibrant yet socio-economically challenging part of the UK. West London is the UK's second largest regional economy in the country but is an area with significant deprivation. We have Heathrow airport on our doorstep, yet there are low levels of both business start-ups and economic growth in much of West London.

### Driving Regional and Local Civic Partnerships

We take our role in the region seriously; we lead the [West London Universities Partnership](#); we are founding members of the [London West Innovation Network](#) and have a [Civic Partnership Agreement with the London Borough of Hillingdon](#). We provide assistance in the local community and support the start-up of financially and socially sustainable businesses through relevant education or resources. For example, our [Bridging the Gap \(BtG\)](#) programme is a business innovation program for London-based start-ups and SMEs, offering support, mentorship, and free workshops. We are working with the local authorities and local business groups to drive and support increased business start-ups and success. We have a strong record of supporting our entrepreneurial graduates to set up their own businesses, including through our role in initiatives such as the [Central Research Laboratory incubator and accelerator](#).

## Brunel-led Project to Help Food Manufacturers Reach Net Zero



A consortium led by Brunel University London has been [awarded £2.5 million by the Engineering and Physical Sciences Research Council \(EPSRC\) for a 4-year project to collaborate with food manufacturers based at Park Royal in West London](#) to come up with innovative ways of reducing the emissions of food supply systems to as close to zero as possible. Visit the project website at <https://parkroyalnetzero.co.uk/>.

Starting in February 2024, Brunel, alongside civic partner West London Business and higher education partner Harper Adams University, are developing a comprehensive programme tailored to address the challenges Park Royal faces with energy, waste and productivity.

The UK's food sector is substantial, employing 4 million people, but has an oversized impact on environmental performance: it consumes nearly a fifth of the country's energy and is responsible for about a third of the country's total greenhouse gas emissions. Consequently, getting this sector greener is of prime importance to help the UK meet its net zero goals.

The Park Royal industrial area – the largest business park in London, straddling the boroughs of Ealing and Brent – is 'London's Kitchen', a thriving hub that's home to more than 500 businesses in the food sector, who collectively produce 30% of the capital's food and drink and contribute £8 billion a year to the economy. As with the broader UK food system, Park Royal's businesses are grappling with technological challenges.

It is the setting for the Place-Based Impact Accelerator Account (PBIAA) focused on net-zero food supply systems – one of ten PBIAAs announced by EPSRC as a £41 million new scheme of research project funding to boost UK economic growth and address regional needs. The project includes hosting events for local food producers, researchers and policymakers to connect and transfer knowledge.

This project is delivering positive change by reducing carbon cost, improving resilience and stimulating economic growth in West London. The overarching mission is to foster circular food economies, fortify absorptive innovation capabilities, and supercharge productivity levels within the cluster of partners and stakeholders. The project will help to provide access to sustainable food production knowledge, skills and technology to local food producers.

Professor Geoff Rodgers – Brunel's Pro Vice-Chancellor of Enterprise and Employment, who as project co-investigator will lead on the civic and business engagement aspects of the project – said: "The Park Royal industrial area is a significant asset within the London and UK economies and an important employment centre in West London."



## Co-creating with business and industry



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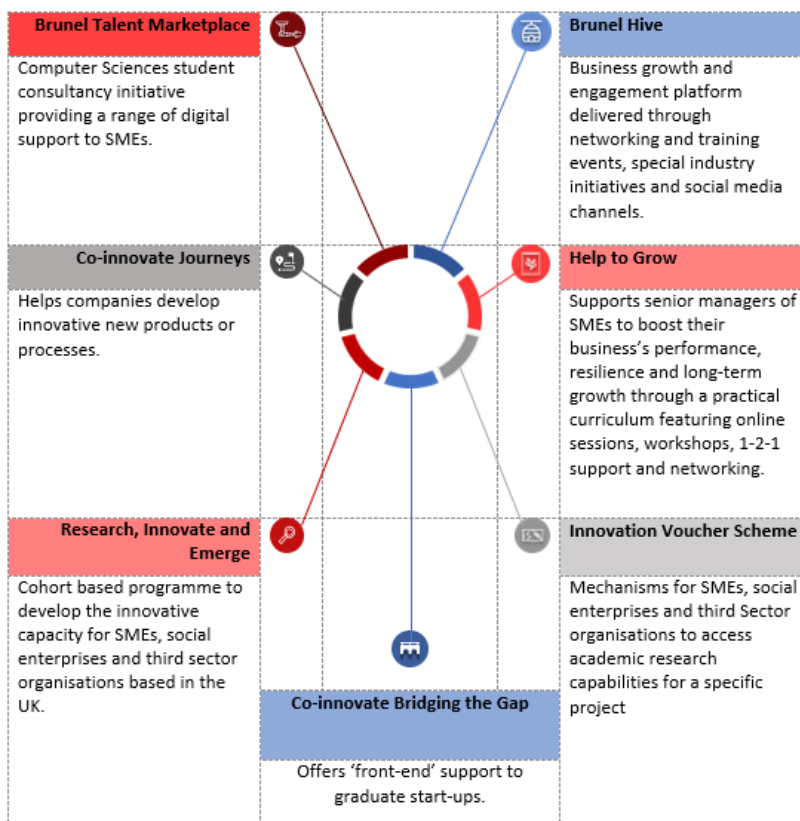
We have developed a business and industry informed educational portfolio that gives our students a rich experience of real-world employment and flexible career opportunities and expanded and deepened educational co-creation with the professions to become a distinctive leader in UK higher education.

As demonstrated above, we have grown and strengthened our research partnerships with industry, adding to our existing nationally recognised partnerships with major companies, and we are at the forefront of emerging opportunities and technologies such as Industry 4.0, clean-tech, health-tech and artificial intelligence.

New initiatives to support SMEs during the period include the [Brunel Talent Marketplace](#) and [RIEm \(Research, Innovate and Emerge\)](#). The Brunel Talent Marketplace is a pilot student consulting initiative in which computer science students deliver projects to business on data & AI, software development, proof of concept, applied R&D and user experience design. So far six projects have been completed involving 18 students to a value of £17,000. In the RIEm programme, we work with cohorts of SMEs to develop their research and innovation strategy, develop proposals and secure funding. Forty-nine businesses, in two cohorts, have taken part in the programme and many have gone on to develop their own collaborative research projects.

Programme delivery has been supported by funding from the [Greater London Authority \(GLA\)](#) and [European Regional Development Fund \(ERDF\)](#), and matched with academic time in order to deliver real value for our external customers /collaborators. The three major projects that deliver aspects of our strategy are:

- Co-innovate
- Central Research Laboratory (CRL)
- Bridging the Gap (BtG)



*The RIEm 2023 programme's final workshop*

We have a commitment to meaningful education around the SDGs across the university, relevant and applicable to all students. The research, teaching and corporate activity that takes place here at Brunel – and which engages individuals, communities, societies and economies – helps to achieve, evaluate and improve the UN SDGs.

Our [Strategic Challenge Areas](#) and pioneering world-leading research accelerate and maximise our abilities to address society's most pressing challenges, in collaboration with partners locally and from across the globe. Our strategy aligns with [UK Research and Innovation's strategy placing the UK at the forefront of the green industrial revolution](#) and committing to a net zero economy, responding to climate change and helping all of us to live more sustainably.

Brunel co-leads the [PISCES](#) project (“Research. Innovation. Action. Preventing plastic pollution in Indonesia ...together”) that brings academic researchers together with business, industry, governments, NGOs, and civil society in a collaborative and inclusive way to understand and manage the risks posed by plastic pollution. It does this by addressing key knowledge gaps that are critical to unlocking a sustainable future for plastics in Indonesian societies. PISCES aims to inform, complement, and catalyse national and global action programmes to solve the plastic challenge – providing evidence-based solutions and system-change interventions to support real change in government policies, industrial practices, and consumer behaviour.



We work through [fighting destructive fishing practices \(March 2024\)](#), [through investigating the sustainable utilisation of oceans](#) through being the [34th best university in the world for reducing inequality \(Times Higher Education Impact Rankings 2024\)](#), through establishing [scholarships for refugees](#), and much more.

[Brunel Public Policy](#) directly supports this by informing policymakers and enhancing public life through knowledge transfer and a breadth of world-leading research designed to meet the changing needs of society – locally, nationally and globally.

Together, our actions aim to make the world the place it ought to be, for us, for the generations after us and for the planet they deserve. This has been at the heart of what we have done since our formation in 1966.