

ENVIRONMENTAL AND SOCIAL SUSTAINABILITY FRAMEWORK

2024-2029

1. INTRODUCTION

1.1 Purpose and scope

Keele University has had a long-standing commitment to promoting “sustainability in all that we do”. This framework sets out the context, governance structure, guiding principles and overarching commitments, to support and enable Keele University to continue its [sustainability journey](#) and accelerate action through the period 2024-2029, to embed and inspire sustainability within and through the University’s;

- Leadership & Governance
- Campus & Operations
- Learning, Teaching & Research
- Partnership & Engagement,

It outlines six focus areas, as shown in Figure 1, to collectively inform and advance sustainable development within Keele University and far beyond. These themes are derived from a consideration of [transformative entry points for achievement of the United Nations Sustainable Development Goals \(UN SDGs\)](#), while ensuring all aspects of Keele University are encompassed in a manner that ensures effective collaboration and action, thereby respecting the interconnections of the goals through Keele University’s established approach to interdisciplinarity.

The six focus areas form the foundations of an overarching ‘SDG Impact Committee’ (SDG as an acronym for Sustainable Development Goals) and sub-groups. This approach is intended to create and/or facilitate the mechanisms and processes required for decision-making, sharing information, planning and managing action, assessing, reporting and reviewing progress, to fully embed sustainability in all areas of the institution with collective responsibility and shared ambition. This will be a key enabler to support the University to track and meet institutional targets and KPIs, and to build upon its significant reputation as a leader in sustainability over this 5-year period.



Figure 1. Keele University Sustainability Framework Model

1.2 Background and Overview

Keele University is the UK's largest integrated campus university, occupying a 617-acre estate and serving around 12,500 students. Its distinctive campus community includes approximately 2,500 students living in University residences, over 180 staff residential properties, two Grade II listed nineteenth-century buildings, extensive woodlands and lakes, and a thriving Science and Innovation Park situated within the Keele Growth Corridor University Enterprise Zone. The University also plays a significant role in the regional economy, contributing more than £0.5 billion annually and supporting over 7,000 direct and indirect jobs.

Founded in 1949 to prepare students for an uncertain post-war world and to contribute to society through research and partnership, Keele has remained true to its original purpose while adapting to the challenges of each generation. Today, the University's mission is to provide world-leading education and research, underpinned by a commitment to:

- the transformative power of education for individuals, communities and society;
- the advancement of knowledge through independent, high-quality research and enquiry;
- the role of education and research in transcending national and social boundaries;
- leadership in environmental sustainability as an essential responsibility for securing a sustainable future; and
- valuing and celebrating the rights, responsibilities, dignity, health and wellbeing of individuals through a living commitment to equity, diversity and inclusion.

Sustainability has become a defining feature of Keele's identity and sense of purpose. For more than fifteen years, the University has demonstrated sustainability leadership through its research, operations, education and engagement activities, delivering positive impacts both locally and globally. Building on decades of internationally recognised research in areas such as clean technology and sustainable development, Keele committed in 2015 to promoting "sustainability in all that we do" as one of its six strategic aims. This commitment was recognised in 2021 when Keele was named Global Sustainability Institution of the Year at the International Green Gown Awards, acknowledging its institution-wide approach to sustainability across campus operations, teaching, research, staff and student experience, and external engagement. In 2024, Keele further reinforced this commitment as one of the founding signatories of the Concordat for the Environmental Sustainability of Research and Innovation Practice, demonstrating a shared ambition to deliver world-leading research in a more environmentally responsible way.

Keele University also recognises that sustainability challenges and their impacts are not experienced equally. Climate change, biodiversity loss, environmental degradation, poverty and health inequalities often disproportionately affect those who are already disadvantaged or underrepresented. As a result, effective sustainability action must go beyond environmental protection to actively promote equity, inclusion, accessibility, participation and wellbeing. The University therefore adopts a whole-institution approach that integrates environmental sustainability with equity, diversity and inclusion, recognising that a sustainable future must also be a fair and just one.

This commitment aligns closely with the United Nations Sustainable Development Goals (SDGs), which provide a globally recognised framework for addressing interconnected environmental, social and economic challenges. Since implementing its Education for Sustainable Development Strategy in 2014, and through the establishment of the Institute for Sustainable Futures in 2018, Keele has embedded the SDGs within its education, research, operations and partnerships. Guided by the principle of "sustainability in all that we do", the University continues to use the SDGs as a framework for creating positive impact, supporting a future in which people, prosperity and the planet can thrive together.



Figure 2 United Nations Sustainable Development Goals (Source: [SDGs \(un.org\)](https://un.org/sdgs))

The interconnections of the 17 goals have been represented in various diagrammatic forms, but perhaps most usefully by the 'SDGs wedding cake' (Figure 3), which depicts the three dimensions of

sustainable development- social, economic and environmental (often simply represented as a Venn Diagram of equal overlapping circles) as tiers, with economy embedded within society, embedded within the biosphere. The foundational biosphere system includes the environmental SDGs of climate action, life on land and in water, and clean water and sanitation; the integrity of which are fundamental to supporting a healthy society, which in turn is critical for a functioning economic system.

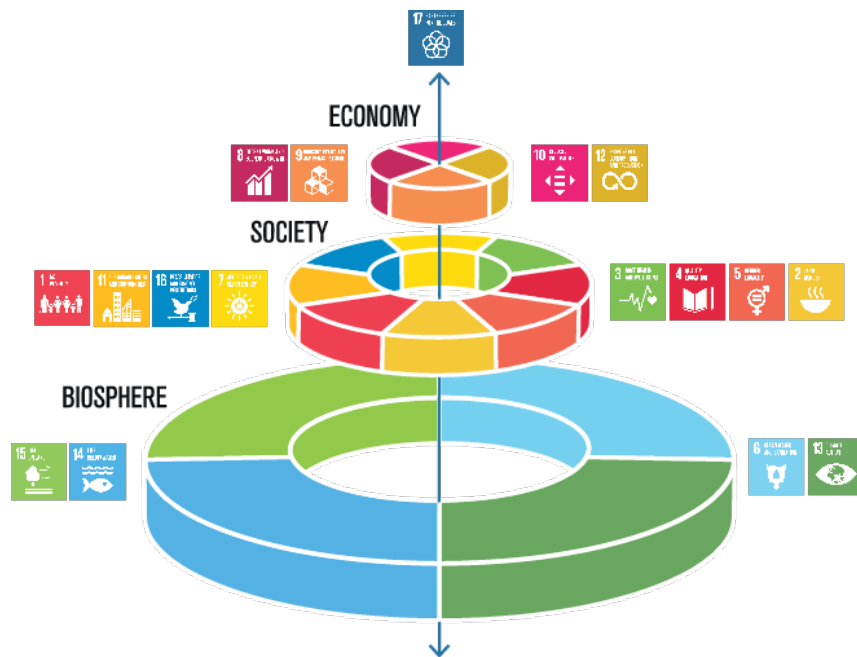


Figure 3. SDGs 'Wedding cake' (Source: [Stockholm Resilience Centre](#))

The stability and resilience of the Earth's systems are increasingly being threatened by human activity. The [planetary boundaries concept](#) (Figure 4) identifies nine critical Earth-system processes that regulate the environmental conditions upon which human societies depend. Together, these boundaries define a "safe operating space" for humanity and provide an important scientific foundation for sustainable development.

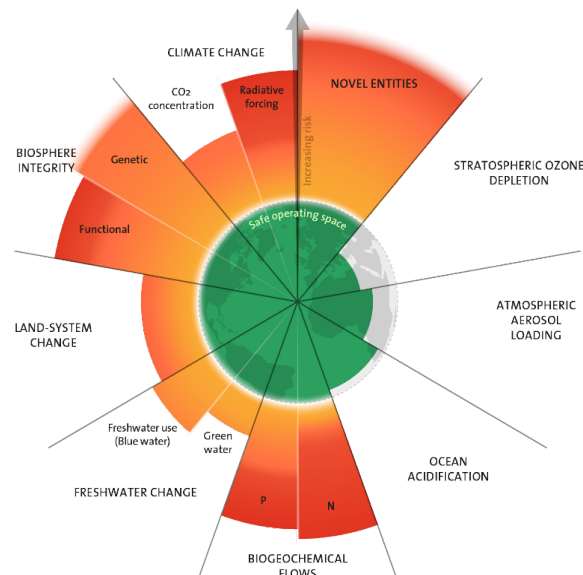


Figure 4. Planetary boundaries framework, first developed in 2009, shown here as updated in 2023 (Source: [Planetary boundaries - Stockholm Resilience Centre](#))

The concept of a safe operating space was further developed through the **Doughnut Economics** framework (Figure 5), which combines planetary boundaries with the social foundations required for human wellbeing. The model describes a "safe and just space for humanity", recognising that sustainable development must both respect ecological limits and ensure social equity.

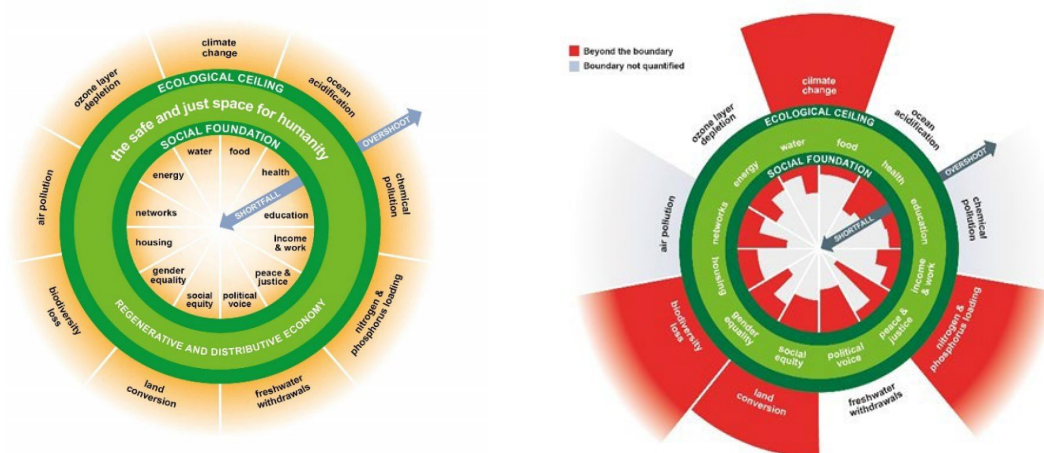


Figure 5. The Doughnut of social and planetary boundaries, and b. with representation of overshoots and shortfalls

Scientific evidence increasingly highlights the interconnected nature of environmental and social challenges. Climate change and biosphere integrity are recognised as two core planetary boundaries because of their fundamental role in maintaining Earth-system stability (Steffen *et al.*, 2015). In 2023, scientists concluded that six of the nine planetary boundaries had already been transgressed (Richardson *et al.*, 2023), while the United Nations warned that progress towards the Sustainable Development Goals is being undermined by the combined crises of climate change, biodiversity loss, pollution and widening inequalities.

Keele University has responded by seeking to embed sustainability across its operations, education, research and partnerships. In 2019, the University declared a climate emergency and committed to achieving carbon neutrality by 2030. This commitment has been supported by significant investments in renewable energy generation, including the Low Carbon Energy Generation Park and Smart Energy Network Demonstrator (SEND), which have reduced campus electricity-related carbon emissions while supporting research, innovation, skills development and engagement with businesses and communities.

While proud of these achievements, Keele recognises that the scale and urgency of global challenges require continued action. The University therefore remains committed to advancing environmental sustainability alongside social justice, wellbeing and economic resilience, recognising that climate action, biodiversity recovery and equitable development must progress together. This commitment was further strengthened in 2024 through membership of the United Nations Sustainable Development Solutions Network (UN SDSN) and increased alignment of the University's sustainability strategy and governance framework with the United Nations Sustainable Development Goals.

2. FRAMEWORK

2.1 Context, Guiding Principles and Commitments

Keele University is committed to following, and contributing to, scientific evidence to understand how individual, organisational, national, and global action should be taken to combat destabilising anthropogenic effects on Earth systems and enhance progression of the United Nations Sustainable Development Goals. Based on current understanding, and notwithstanding current macro-environmental and sector challenges, our overarching institutional-level commitment is to plan, act and review in accordance with legislation and guidance for best-practice³ in regard to;

1. Meeting goals and associated targets of the [17 UN Sustainable Development Goals](#); fulfilling obligations as a signatory of the [SDG Accord](#) and a member of the UN SDSN.
2. Limiting the increase in Earth's average surface temperature, by 2100 compared with pre-industrial levels, to 1.5 °C, necessitating net zero carbon dioxide emissions globally by the early 2050s; fulfilling obligations as a signatory of the [Race to Zero for Universities & Colleges](#) and [Concordat for the Environmental Sustainability of Research and Innovation Practice](#).
3. Halting and reversing biodiversity loss on land and in the ocean; fulfilling obligations of our [Nature Positive Pledge](#).
4. Contributing to increased understanding of Earth System science and the systemic and technical solutions that are required to protect, recover and rebuild resilience, and enhance prosperity and equity for all within a 'safe and just space for humanity'; examining our business model and decisions against the [five aspects](#) of organisational design and [ten principles of the UN Global Compact](#), to ensure we advocate for a business model of operation that ensure social justice and ecological safety.
5. Embedding principles of equity, diversity, inclusion, accessibility and intersectionality within sustainability governance, decision-making, education, research, campus development and community engagement, supporting a fair and inclusive transition to a net zero, nature-positive and socially just future.
6. Being accurate, transparent, accountable, collaborative, and proactive in sharing knowledge and building effective partnerships.

These guiding principles and associated pledges will be monitored and refined in line with emerging evidence, guidance, and legislation. Action upon these principles and commitments will be decided, delivered and reviewed by the SDG Impact Committee and associated sub-groups displayed in Figure 1 and further outlined below.

2.2 Structure, Implementation and Governance

The commitments and pledges outlined above reflect the University's recognition of the urgent and interconnected environmental, social and economic challenges facing society. Delivering meaningful progress requires collective responsibility, institutional alignment and effective collaboration across the University.

To support this, the SDG Impact Committee provides strategic leadership and governance of the University's SDG Impact agenda. Supported by the thematic sub-groups outlined in Table 1, the

Committee oversees the development, implementation and review of the University's SDG Impact Strategy and associated action plans, ensuring a coordinated approach to delivering the University's sustainability commitments and contribution to the United Nations Sustainable Development Goals. The Committee is also responsible for institutional sustainability reporting, assurance and benchmarking, including oversight of submissions to the Times Higher Education Impact Rankings, QS Sustainability Rankings, People & Planet University League and other relevant sector frameworks. In addition, it oversees production of an annual SDG Impact Report, which evaluates progress, achievements, challenges and future priorities.

An SDG Impact Management Framework, founded upon an EcoCampus-accredited Management System and the Plan-Do-Check-Act (PDCA) principles of continual improvement, provides a consistent approach to planning, delivery, monitoring and review across all sustainability themes, while enabling individual areas to retain ownership of their priorities, objectives and specialist expertise. Thematic groups bring together representatives from academic faculties, professional services and the student body to coordinate activity and monitor progress. Where governance arrangements already exist, such as for Equity, Diversity and Inclusion, the framework seeks to align and support existing activity rather than duplicate it. In other areas, dedicated sub-groups have been established to develop and oversee strategies, objectives and action plans.

Table 1 SDG Impact Committee and associated sub-groups

GROUP/ SUB-GROUP	PRINCIPAL SDGS*	LEADS**	EXAMPLES OF STRATEGIC OBJECTIVES / HEADLINE KPIS (REVIEWED & AGREED ANNUALLY)
SDG IMPACT COMMITTEE		Deputy Vice-Chancellor; PVC International	Delivery of SDG Impact Strategy; THE Impact Rankings performance; QS Sustainability Ranking performance; People & Planet University League position; Publication of Annual SDG Impact Report
Sub-groups			
SUSTAINABLE OPERATIONAL STRATEGY & PLANNING	  	Head of Net Zero Delivery & Sustainability	Scope 1 & 2 emissions reduction; Scope 3 emissions reduction; carbon emissions intensity; renewable energy generation and consumption; estate decarbonisation milestones; climate risk management;

RESPONSIBLE PRODUCTION, CONSUMPTION AND WASTE MANAGEMENT	  	Deputy Director of Estates Services and Campus Services; Head of Net Zero Delivery & Sustainability	Energy per GIA; Waste per FTE; recycling rate; water consumption per FTE; sustainable procurement performance; business travel emissions; commuting emissions and modal split; circular economy initiatives.
NATURAL ENVIRONMENT MAINTENANCE, RESTORATION & DEVELOPMENT	 	Professor of Sustainability in Higher Education, School of Life Sciences; Head of Capital Planning and Programme Delivery	Biodiversity baseline completion; biodiversity net gain/habitat condition index; biodiversity value change from baseline; habitat enhancement area; habitat connectivity; number of nature-based engagement and restoration projects.
EDUCATION & RESEARCH FOR SUSTAINABLE DEVELOPMENT		PVC Education; PVC Research & Innovation	Percentage of programmes embedding sustainability and SDG learning outcomes; sustainability literacy and educational gain; SDG-aligned research projects and partnerships; Living Lab projects; REF impact linked to SDGs.
STAFF & STUDENT EQUITY, DIVERSITY & INCLUSION, HEALTH & WELLBEING,	   	Associate Director of EDI; Head of Student Accessibility & Inclusion	Access and Participation Plan targets achieved; reduction in awarding gaps; student continuation and success measures; EDI representation targets; staff & student wellbeing indicators; pay gap measures
SDG COMMUNICATIONS, ENGAGEMENT & PARTNERSHIPS	  	Head of Corporate Communications and Marketing; Director of Engagement & Partnerships	Participation in sustainability initiatives; sustainability communications reach; external partnerships contributing to SDGs; volunteering and community engagement activity; sustainability reputation indicators.

*All sub-groups will contribute to several other SDGs- for example aims & objectives of Education & Research for Sustainable Development will contribute to all 17 SDGs

**SDG Impact Committee and sub-groups include representation from academic services, professional services and student body.

Further details of the SDG Impact Committee, thematic sub-groups, sustainability themes and associated commitments can be found [here](#)¹. Each theme is responsible for establishing SMART (Specific, Measurable, Achievable, Relevant and Time-bound) objectives, targets and key performance indicators appropriate to its area of responsibility, linked to the Sustainable

¹ Internal access only. To request access or for further information, please contact sustainability@keele.ac.uk

Development Goals. These are reviewed annually and progress is monitored and reported to the SDG Impact Committee and subsequently presented within the publicly available Annual SDG Impact Report.

3. RELATED POLICIES AND PROCEEDURES

[Access and Participation Plan](#)
[Adoption Leave and Pay Policy & Procedure](#)
[Bullying, Harassment and Victimisation- Policy Statement for Students](#)
[Carbon Accounting, Reporting and Management Code of Practice](#)
[Dignity and Respect Policy & Procedure](#)
[Equity, Diversity and Inclusion Strategy and objectives](#)
[Ethical Investment Code of Practice](#)
[Exceptional Circumstances Code of Practice](#)
[Fixed Term Working Policy and Procedure](#)
[Gender Segregation Joint Code of Practice](#)
[Health and Safety Policy](#)
[Inclusive Education Framework](#)
[Learning and teaching strategy](#)
[Maternity Leave and Pay Policy and Procedure](#)
[Menopause Support for Staff and Students Code of Practice](#)
[Modern Slavery Statement](#)
[Parental Leave Policy](#)
[Paternity Partner Leave and Pay Policy](#)
[Reasonable Adjustments for Disabled Students Policy](#)
[Recruitment and Selection Code of Practice](#)
[Responsible Procurement Strategy](#)
[Sexual Violence & Misconduct Policy for Staff & Students](#)
[Shared Parental Leave and Pay Policy and Procedure](#)
[Support to Study Policy](#)
[Sustainability in Food Code of Practice](#)

4. REVIEW, APPROVAL & PUBLICATION

This sustainability framework will be reviewed/updated at least annually by the Head of Net Zero Delivery & Sustainability in consultation with the SDG Impact Committee, and Section 3- Related Policies and Plans will be updated accordingly.

5. REFERENCES

Lucht, W. (2023) quoted within University of Copenhagen “**Six of nine planetary boundaries now exceeded**” Available at; [Six of nine planetary boundaries now exceeded \(phys.org\)](https://phys.org/news/2023-06-six-of-nine-planetary-boundaries-now-exceeded.html) (Accessed 10.07.2024)

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Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). **Planetary boundaries: Guiding human development on a changing planet**. *Science*, 347(6223), 736–736. <http://www.jstor.org/stable/24746123>

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6. DOCUMENT CONTROL INFORMATION

Document Name	Environmental and Social Sustainability Framework
Owner	Head of Net-Zero Delivery & Sustainability
Version Number & Key Amendment	1.1
Equality Analysis Form Submission Date	N/A
Approval Date	23 July 2024
Approved By	University Executive Committee
Date of Commencement	23 July 2024
Date of Last Review	08 July 2026
Date for Next Review	08 July 2027
Related University Policy Documents	Access and Participation Plan Bullying, Harassment and Victimisation- Policy Statement for Students Carbon Accounting, Reporting and Management Code of Practice Dignity and Respect Policy & Procedure Equity, Diversity and Inclusion Strategy and objectives Ethical Investment Code of Practice Exceptional Circumstances Code of Practice Fixed Term Working Policy and Procedure Gender Segregation Joint Code of Practice Health and Safety Policy Inclusive Education Framework Learning and teaching strategy Menopause Support for Staff and Students Code of Practice Modern Slavery Statement Parental Leave Policy Paternity Partner Leave and Pay Policy Reasonable Adjustments for Disabled Students Policy Recruitment and Selection Code of Practice Responsible Procurement Strategy Sexual Violence & Misconduct Policy for Staff & Students Shared Parental Leave and Pay Policy and Procedure Support to Study Policy Sustainability in Food Code of Practice
For Office Use – Keywords	