



University of Cambridge Sustainability Strategy Green Paper

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Cambridge Institute for Sustainability Leadership

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1. Purpose of this paper

The purpose of this Green Paper is to invite thoughts, ideas and feedback from across the University community to guide the development of a Sustainability Strategy for the University of Cambridge.

Development of the Sustainability Strategy is being led by the University's [Sustainability Team](#). [Cambridge Institute for Sustainability Leadership](#) (CISL) are supporting the Sustainability Team in initial engagement with staff and students to shape development of the Strategy.

The new Strategy will replace the [Environmental Sustainability Vision, Policy and Strategy 2015–2020](#). It will incorporate all aspects of sustainability – environmental, social and economic – with an ambition to not only align with the [Paris Agreement](#) on climate change, but also to address the wider [UN Sustainable Development Goals](#) (SDGs), which provide 'a shared blueprint for peace and prosperity for all people and the planet, now and into the future.'¹ The new Strategy will bring together all the significant sustainability-related activity that is already taking place across the University, as well as potentially identifying some new levels of ambition and areas for action.

The Sustainability Team recognises the complexity and diversity of the stakeholder environment within the University and is keen to consult and draw on the expertise and insights across the University as much as possible to inform development of the new Strategy. With this in mind, we have designed a phased process for developing the Strategy that involves consulting widely on a draft proposal, before refining the strategy in the light of this consultation. This is broken down into four key phases of development (Figure 1):

- Phase 1: An initial gathering of ideas from key stakeholders across the University via a process of engagement over Michaelmas term. This will include workshops and focus groups; presentations to Schools, departments and key committees; 1-1 interviews and via feedback on this Green Paper.
- Phase 2: Compilation of a proposed Sustainability Strategy, reflecting the key themes and level of ambition identified through Phase 1, and seeking approval of the proposed Strategy by key committees and University Council for formal consultation.
- Phase 3: University-wide consultation, as well as further engagement with key external stakeholders, will guide amendment and further development of the Strategy.
- Phase 4: Finalisation of the Strategy, followed by seeking approval from relevant committees, General Board and University Council.

The development of this Green Paper has been informed by data and information related to current sustainability efforts at the University, reference to external frameworks and emerging best practice, and early discussions with several key stakeholders from across the University community. That said, we do not propose to have addressed all of the issues that need to be considered and discussed as part of the development of the Sustainability Strategy. This paper captures our thinking to date, but now we would like to hear from the University community so that we can work together to co-create a Sustainability Strategy that is ambitious and forward thinking.

Throughout the following sections of the paper, we have set out our current thinking on why sustainability is important to the University, what sustainability means for the University, and what the University needs to do to become a sustainable institution. **We have posed a number of specific questions throughout, to test our ideas and assumptions at each stage. We also welcome comments**

¹ United Nations (2015). [Transforming Our World: The 2030 Agenda for Sustainable Development](#).

on any aspect(s) of the document as a whole. We invite all members of the University community to comment on the contents of this paper.

The questions posed throughout this paper are displayed in boxes like this. We ask that you respond to these questions by filling out [this online form](#) by **Friday 9th December 2022**.

This is not the start of the University’s sustainability journey; there are many excellent sustainability-related commitments, strategies, academic and operational activities already in place and underway (see Annex 1 for examples). In developing the new Sustainability Strategy, we endeavour to signpost all of the excellent work and research that is already taking place across the University, identify where we can amplify our positive impact and be more ambitious, and capture all of this within a framework that reflects the University’s strategic priorities for helping to shape a sustainable global society.

A glossary of key terms used throughout this paper is provided as Annex 2.

If you have any questions about this process, please get in touch with the Sustainability Team at sustainabilitystrategy@admin.cam.ac.uk.

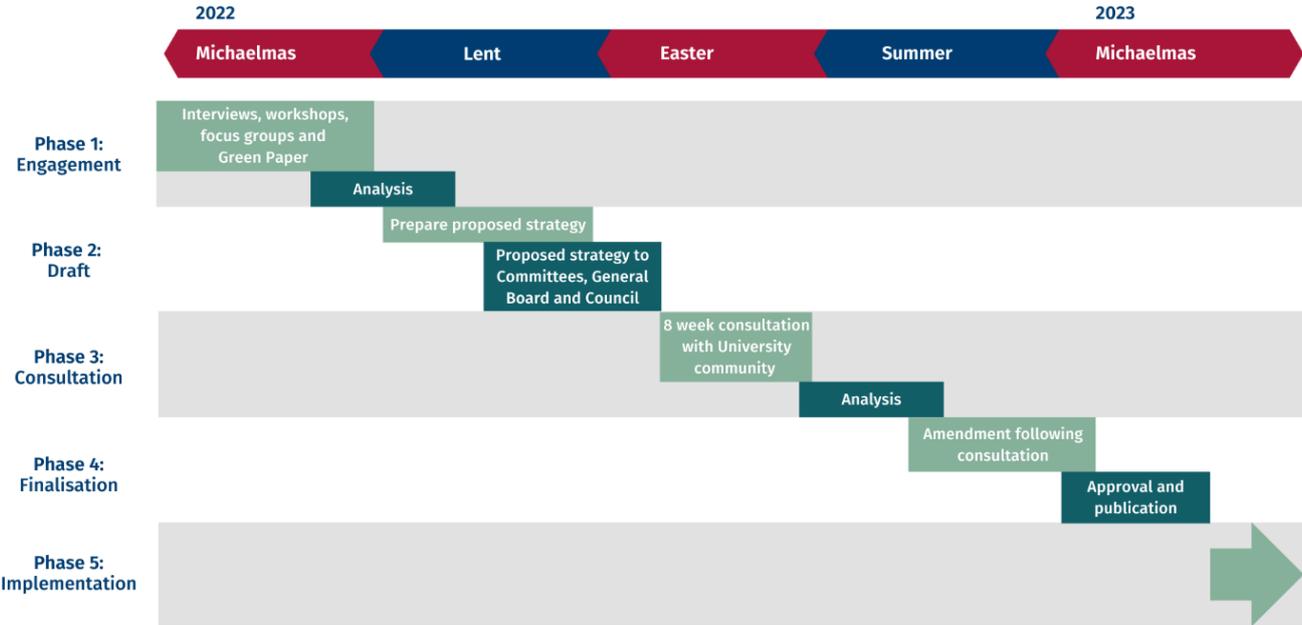


Figure 1: Proposed Sustainability Strategy timeline detailing the phases of development.

2. Why sustainability is critical

In 1987, the [United Nations Brundtland Commission](#) defined sustainability as ‘meeting the needs of the present without compromising the ability of future generations to meet their own needs.’ More simply, sustainability can be defined as the pursuit of long-term wellbeing for all people and planet². The UN SDGs provide a framework for achieving this, by balancing the environmental, social and economic needs of society, now and in the future. The SDGs reflect that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests¹.

As outlined in [A Blueprint for a Green Future](#), published by Cambridge Zero in November 2020, the COVID-19 pandemic exposed the lack of resilience in the global system that is already failing to protect the wellbeing of hundreds of millions of people. The pandemic showed us that the global system is unprepared for future shocks driven by climate change, biodiversity loss, and environmental degradation; and exposed the sustainability implications of global mega-trends such as increased urbanisation, rising inequality and an ageing population. The University of Cambridge has been actively involved in the research and systems thinking required to understand how we (humanity) have come to create these global problems, and the actions that we must take to solve them. A recent example of this is [The Economics of Biodiversity: The Dasgupta Review](#), an independent report commissioned in 2019 by the HM Treasury.

Recent reports have revealed the perilous state of nature, as well as our climate^{3,4}. For example, global wildlife populations have plummeted by 69% on average since 1970, with a further million at risk of extinction. As Sir Robert Watson summarised, “the health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.” The UN and other experts make it clear that becoming a sustainable society requires transformational change across the global system³. Awareness of these threats to our way of life is creating a significant shift in stakeholders’ expectations of organisations. A global survey across fifty countries in 2021 found that 64% of people believe climate change is a global emergency, reflecting shifts in civil society⁵. Financial Institutions are waking up to climate and nature-related risks and aligning their strategies to the decarbonisation of the economy⁶. Governments are also creating the regulatory enablers to decarbonise and protect nature, such as the [European Union’s Green Deal](#), the [UK government’s Net Zero Strategy](#) and the [Department for Education’s Sustainability and Climate Change Strategy](#).

As stakeholders become more aware of these sustainability trends, so in turn their expectations and priorities shift; for example, in terms of the organisations they want to study at, work for, invest in and buy from. Most people want to know that organisations they are involved in, including universities, are a part of the solution and not the problem. In line with this, recent best practice² suggests that organisations need to:

² The British Standards Institution (2022). [PAS 808:2022](#).

³ United Nations (2022). [Nature’s dangerous decline ‘unprecedented’](#).

⁴ IPCC (2022). [Climate Change 2022: Impacts, Adaptation and Vulnerability](#).

⁵ UNDP (2021). [The Peoples’ Climate Vote](#).

⁶ GFANZ (2022). [Accelerating the transition to a net-zero global economy](#).

- a) Direct their purpose and innovation to finding solutions to long-term wellbeing for all people and planet.
- b) Prove that they are not degrading the social and environmental systems that sustain people and planet, as they pursue their purpose.
- c) Achieve their purpose in a method that is wise and ethical, even if that is beyond what the law dictates.

While all organisations need to respond to this demand, universities have a particularly crucial role to play, as the developers of future leaders and solutions. Research from the global academic community is driving many aspects of sustainable development, and the higher education sector offers a critical learning infrastructure to support society in transitioning away from unsustainable practises, but what roles can a University play in the transformation towards a sustainable society and economy? ^{7,8}.

Question 1: Do you agree that global sustainability trends are requiring organisations, sectors, society and the economy to transform? If not, why not?

⁷ Hurth and Stewart (2022). [Re-purposing Universities: The Path to Purpose.](#)

⁸ Tilbury (2011). [Higher education for sustainability: a global overview of commitment and progress.](#)

3. Why sustainability matters to the University

The University of Cambridge, and the higher education sector as a whole, is seeing a shift in the expectations of its key stakeholders, ranging from staff and students, through to key partners, collaborators, and government funding bodies. These stakeholders are increasingly demanding that the University demonstrates how it is playing an active role in tackling the global sustainability crisis, therefore helping to protect the long-term wellbeing of all people and the planet.

The University's mission is 'to contribute to society through education, learning and research at the highest international level'.

We believe that sustainability, and specifically the UN SDGs, provide a powerful framework for defining **how** the University can, through pursuit of its mission, contribute positively to society and help shape the future we want. The SDGs represent a cross-sectoral, globally recognised aspiration that encompasses environmental, social and economic considerations. This paper seeks to test the hypothesis that the University's mission is in the service of delivering the SDGs.

Furthermore, we believe that the University's mission is inextricably linked with sustainability in two respects. Firstly, delivery of the University's mission is foundationally dependent on a sustainable society; the University requires natural capital, provided by planetary resources, as well as human and social capital to function effectively as a university. On the other hand, through pursuit of its mission, the University is well positioned to enable the transition to a sustainable society, in a number of ways:

- It is able to utilise its academic expertise and position as a world-leading institution to inform and drive the transformational change required to tackle sustainability challenges at scale.
- It is able to demonstrate leadership and engender optimism by showcasing how complex problems can be effectively addressed through evidence-based and collaborative approaches.
- It is able to lead by example by showing that it is putting its own house in order, and willing to share its successes and failures to benefit society in its transition to a sustainable future.

We have illustrated this inter-relationship between sustainability and the University's mission in the diagram shown below (Figure 2). Within this relationship, the SDGs provide a framework for ensuring that as the University pursues its mission, it is protecting the foundational needs (natural, social and human capital) that the University itself, society and the planet depend upon for long-term wellbeing.

Aligning the University's mission with the SDGs also has the potential to strengthen the University's licence to operate, attract, motivate and retain key stakeholders and partners (from funders and business partners to students and lecturers), and to open up new sources of research and funding.



Figure 2: Inter-relationship between sustainability, the UN SDGs and the University's mission. Adapted from Hurth and Stewart (2022)⁷.

Question 2: Do you agree that the University's mission should be in the service of enabling and delivering the SDGs? If not, why not?

4. How the University impacts sustainability, and vice versa

University of Cambridge staff and students are involved in a diverse range of activities, making different contributions to a sustainable future, from research to procuring products. As we consult on the new strategy, we will need a common framework to map those current and potential contributions that the University can make to the SDGs. Therefore, we have mapped out the University’s core functions, and how they might relate to sustainability.

We believe that the University’s core functions can be categorised under four main categories, which are explained in the table below.

<p style="text-align: center;">Research & thought leadership</p> <p>Ground-breaking research and innovation sit at the heart of what the University of Cambridge is for and about. Thousands of researchers within the University are already working on a wide range of sustainability-related topics, helping us to address the challenges that face our world today and in the future.</p>	<p style="text-align: center;">Teaching</p> <p>The University of Cambridge strives to provide a world-class learning environment that trains future generations of researchers, innovators and leaders.</p>
<p style="text-align: center;">Societal engagement</p> <p>As a thought leader and catalyst of innovation, the University of Cambridge has a rich network of relationships and partnerships that engage and influence society.</p>	<p style="text-align: center;">University operations & estate</p> <p>The University of Cambridge is a major employer, operates a vast number of processes and procedures and manages a large estate. These all have an impact, from the construction and use of buildings, through to the food, products and services the University procures.</p>

By undertaking its core functions, the University contributes to, and has a wider impact on, society through:

- Informing (government) policy
- Scaling up innovation and solutions
- Alumni and future leaders

Question 3: Do you agree that the four areas shown above represent the University’s core functions? If not, what do you think is missing or needs changing?

We have used these core functions, to identify the University’s most significant sustainability impacts, both positive and negative, now and in the future. This informs the next section, where we set out what we think the University’s priorities could look like.

However, we are keen to hear from the University community on what they see as the University’s greatest area(s) of sustainability impact, both positive and negative. For example, do staff and students see the University’s area of greatest sustainability impact to be through its research, and perceive this impact as predominantly positive; or do they see the area of greatest impact to be the University estate and operations, and perceive this impact to be predominantly negative?

The relationship between the University’s core functions and the wider society is illustrated in Figure 3 below.

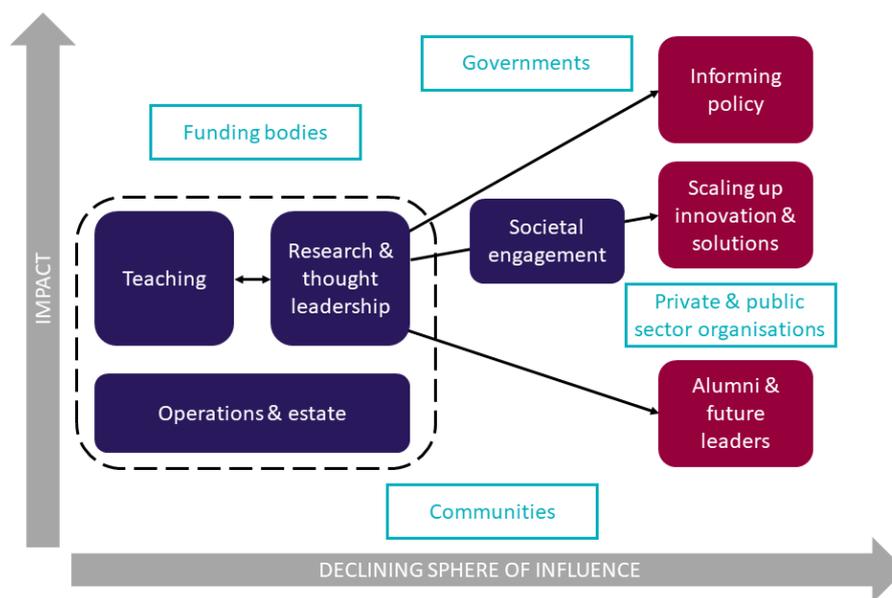


Figure 3: Relationship between the University’s core functions and wider society. In blue are the University’s core functions, within the University (dotted line) and external to it (societal engagement). In red are some of the main ways in which, through its core functions, the University has an indirect impact on society. The x and y axes display impact (positive or negative) and declining sphere of influence, respectively. The main stakeholder groups are shown in pale blue, placed relative to how they link with core function (and not in relation to the axes). This figure illustrates how the University’s core functions relate together and impact on society.

Question 4: How would you rank the University’s four core functions in terms of having the greatest potential sustainability impact (positive or negative)? Please briefly explain your answer.

5. Proposed sustainability strategic priorities for the University

Assuming the University's mission is in the service of the SDGs and the core functions above, this section proposes a number of strategic priorities for a sustainable University. Under each priority area, we provide examples of how we think the University can contribute to pursuit of the SDGs and long-term wellbeing for all.

The final Sustainability Strategy will contain some specific goals (outcome goals for a functional area) and commitments (outcomes or process changes that will enable delivery of our goals) relating to these priority areas. These will play an important role in holding us accountable and ensuring we are effectively addressing our main areas of sustainability impact. Some of these commitments may be specified as measurable goals (for example, net zero carbon across all scopes by 2048), where others may be process outcomes for how we deliver on the SDGs (for example, our teaching will be designed and delivered in service of the SDGs). **Our intention is to co-create these goals and commitments with stakeholders throughout the strategy engagement process outlined in Section 1.** Therefore, these proposed goals and commitments are designed to inform and create debate on what our focus areas and ambitions should look like in the new strategy.

As you read this section, we encourage you to consider what specific commitments the University should adopt against each of its priority areas, and to reflect its level of ambition against each.

Strategic priority 1: Sustainable research

Example goals i.e. how the University might achieve this:

- Conduct world-class research in all areas of sustainability.
- Reinvent how (present and future) societal challenges are addressed.
- Explore breakthrough technologies to support decarbonisation, become nature positive, etc.
- Conduct multidisciplinary research to explore intersections between different sustainability outcomes.

Example commitments i.e. what this might look like in practice:

- Conduct technical research to drive decarbonisation across economies and industries, especially hard-to-abate sectors (e.g. aviation).
- Discontinue all research into technologies that enable fossil fuel exploration.
- Develop the evidence base for restoring and protecting biodiversity and catalyse innovations that restore and protect nature.
- Conduct interdisciplinary research exploring the societal impacts of advancing sustainable development on women and disadvantaged groups in the Global South.

Strategic priority 2: Sustainable teaching

Example goals i.e. how the University might achieve this:

- Engage with and champion the 'Education for Sustainable Development' agenda⁹.
- Enable interdisciplinary thinking/collaboration for deep systems transformation.
- Empower and mobilise all students to lead and deliver on sustainable development.

Example commitments i.e. what this might look like in practice:

- Integrate rigorous sustainability-related content into formal curricula, across all disciplines.
- Actively work towards providing equitable admissions processes for students from a diverse range of backgrounds.

Strategic priority 3: A sustainable community

Example goals i.e. how, the University might achieve this:

- Build a diverse and inclusive staff and student community.
- Actively improve the health, safety and wellbeing of the wider University community.
- Share research findings with business leaders, policymakers, and local and global communities.
- Enable 'co-creation for sustainability' by collaborating with diverse actors to create solutions and societal/industrial transformations that materialise sustainable development.

Example commitments i.e. what this might look like in practice:

- Ensure fair treatment and opportunity for all within the University community.
- Expand personal/professional development opportunities for all staff and students and invest in professional development in relation to sustainability, across all levels and types of staff.
- Engage policymakers, business leaders and communities to promote mainstream adoption of low-carbon technologies and economic/business models.

Strategic priority 4: Sustainable operations

Example goals i.e. how the University might achieve this:

- Create an environmentally sustainable estate.
- Investigate and address the impacts caused by University operations and our supply chain.
- Build sustainability considerations into our core operational processes and procedures (finance, procurement, recruitment, admissions, etc).

Example commitments i.e. what this might look like in practice:

- Achieve net-zero carbon emissions across all emission scopes (1, 2 and 3) by 2048.
- Deliver biodiversity net-gain across the University estate and beyond.
- Select and work with suppliers that have adopted evidence-based and ambitious sustainability targets/ standards of their own.

⁹ UNESCO (2020). [Education for Sustainable Development: A roadmap.](#)

Question 5: Do you agree these represent the University's strategic priorities for sustainability? If not, what do you think is missing or what would you change?

Question 6: Which examples of goals and/or commitments reflect the level of ambition you would like to see the University of Cambridge adopt? If the examples provided do not reflect the ambition you would like to see, please provide your own examples.

6. The University's guiding principles for sustainability

Whatever strategic priorities, goals and commitments are adopted, we will need to clarify **how** they will be implemented and delivered. While this will depend on the final strategy, this section highlights some proposed guiding principles and cross-cutting areas for consideration.

Guiding principles

We believe that the following guiding principles should inform development and implementation of the Sustainability Strategy:

- Our priorities and ambitions will be co-created with members of the University community.
- Our commitments will be evidence-based.
- Our approach will be informed by research and best practice.
- Our progress will be reported regularly and transparently.
- Our outcomes will be continually reflected upon and used as an opportunity to learn from experience.

Question 7: Do you agree with the suggested guiding principles? If not, what would you change?

Cross cutting enablers

We also believe that there will need to be University-wide enablers to ensure the Strategy's successful delivery and integration into our working practices. The following list summarises the key enablers we have identified:

- **Leadership**
We will build the capability and accountability of our leaders.
- **Governance**
We will ensure that sustainability is embedded throughout the University's governance structure and processes, from the institutional level to centralised decision-making.
- **Working practices**
We will align our working practices with the new strategy, goals and commitments.
- **Capacity**
We will develop sufficient capacity across the organisation for sustainability decisions and actions to be incorporated into everyday University activity.
- **Collaboration**
We will work collaboratively and in partnership, within the University and externally, to advance the sustainability agenda.

7. Summary and call to action

Thank you for taking the time to read this Green Paper. The questions posed throughout can be answered via [this survey](#). There is also an opportunity at the end survey to provide any useful examples of pioneering sustainability practices that reflect the level of ambition you would like to see at the University of Cambridge. Further to this, you will also be able to add any additional comments you may have relating to the Green Paper as a whole. Through feedback gathered from this paper, as well as via other means of engagement and consultation throughout the development process, we aim to create a Sustainability Strategy that reflects the thoughts and ambitions of the University of Cambridge community.

We encourage all members of the University community to stay up to date with the Sustainability Strategy development process, and further opportunities to be involved, by regularly reviewing our [website](#).

Annex 1 - Examples of current sustainability-related activity at the University

- [Cambridge Zero](#)
Cambridge Zero exists to maximise the University of Cambridge's contribution towards achieving a resilient and sustainable zero-carbon world. It does this by acting as a hub and an umbrella, integrating and enhancing the University's activities through research and innovation, education and training, engagement and leading by example in decarbonisation efforts.
- [Cambridge Institute for Sustainability Leadership](#)
The University of Cambridge Institute for Sustainability Leadership (CISL) is an inter-disciplinary research institute developing leadership and solutions for a sustainable economy.
- Broad range of sustainability-related teaching and research
- Community outreach and public engagement events such as the [Cambridge Festival](#)
- [Divestment](#)
In October 2020, the University announced its intention to divest from all direct and indirect investments in fossil fuels by 2030.
- [People Strategy](#)
The People Strategy aims to ensure the University of Cambridge is the employer of choice with a culture, policies and procedures that set high expectations, whilst providing a stimulating and inclusive environment for its people and sustaining its reputation for global leadership in scholarship and research.
- [Widening participation: Our commitment to outreach](#)
- [Carbon Reduction Strategy](#)
In 2019, the University of Cambridge became the first university in the world to announce a Science Based Target (SBT) for carbon reduction, committing the university to reducing its scope 1 and 2 emissions to absolute zero by 2048, with an aspiration to reach the target by 2038. The [Environmental Sustainability Report 2020-21](#) shows that we are on track to meet our SBT. The University is also committed to developing targets for reducing its scope 3 carbon emissions, and a scope 3 screening assessment is currently underway.

Note: While the University's current SBT includes only scope 1 and 2 emissions, we are committed to setting a target for our scope 3 emissions. The University is exploring multiple avenues for this, including a net zero target aligned with the [Science Based Target Initiative \(SBTi\) Net Zero Standard](#). Such a target would cover all emissions in our value chain (scopes 1, 2 and 3) and restrict the use of offsetting until the University has achieved deep decarbonisation of 90-95% across all scopes.
- [Biodiversity Action Plan](#)
The University recently launched a Biodiversity Action Plan (BAP), a 10-year vision and set of principles that provide a framework for biodiversity conservation on the University of Cambridge estate, and the Greater Cambridge Area more generally. The BAP promotes education and community action, encouraging interventions, research and innovation to enhance and protect biodiversity for future generations.

- [Cambridge Conservation Initiative](#)
- [Transport Strategy](#)
- [Waste Strategy](#)

For the strategies and policies that are out of date, the University is committed to reviewing and updating them as soon as possible.

The University [reports publicly](#) against its current Environmental Sustainability Strategy each year (find a one-page summary of our 2020/21 achievements [here](#)). The report provides details of the University's successes in sustainability, the lessons learned and the plans for the forthcoming year.

Annex 2 - Key terms

Biodiversity: The variety and variability of life on Earth.

Biodiversity net gain: An approach to development, land management etc. that aims to leave the natural environment in a measurably better state than it was beforehand.

Carbon: In the context of climate change, carbon is commonly used as a shorthand for carbon dioxide, the most abundant greenhouse gas released by human activity. Other greenhouse gases include methane, nitrous oxide and fluorinated gases.

Net zero carbon: When carbon emissions released into the atmosphere are balanced by carbon emissions removed from the atmosphere (i.e. by offsetting).

Scope 1 emissions: Direct carbon emissions from owned or controlled sources, on site.

Scope 2 emissions: Indirect emissions from the generation of purchased electricity, steam, heating and cooling etc.

Scope 3 emissions: All other indirect emissions that occur in the University's value chain, including purchased goods and services, investments, business travel, employee commuting, waste disposal etc.

Sustainability: The pursuit of long-term wellbeing for all people and the planet

UN SDGs: A collection of 17 interlinked global goals designed to be shared blueprint for peace and prosperity for people and the planet, now and into the future.