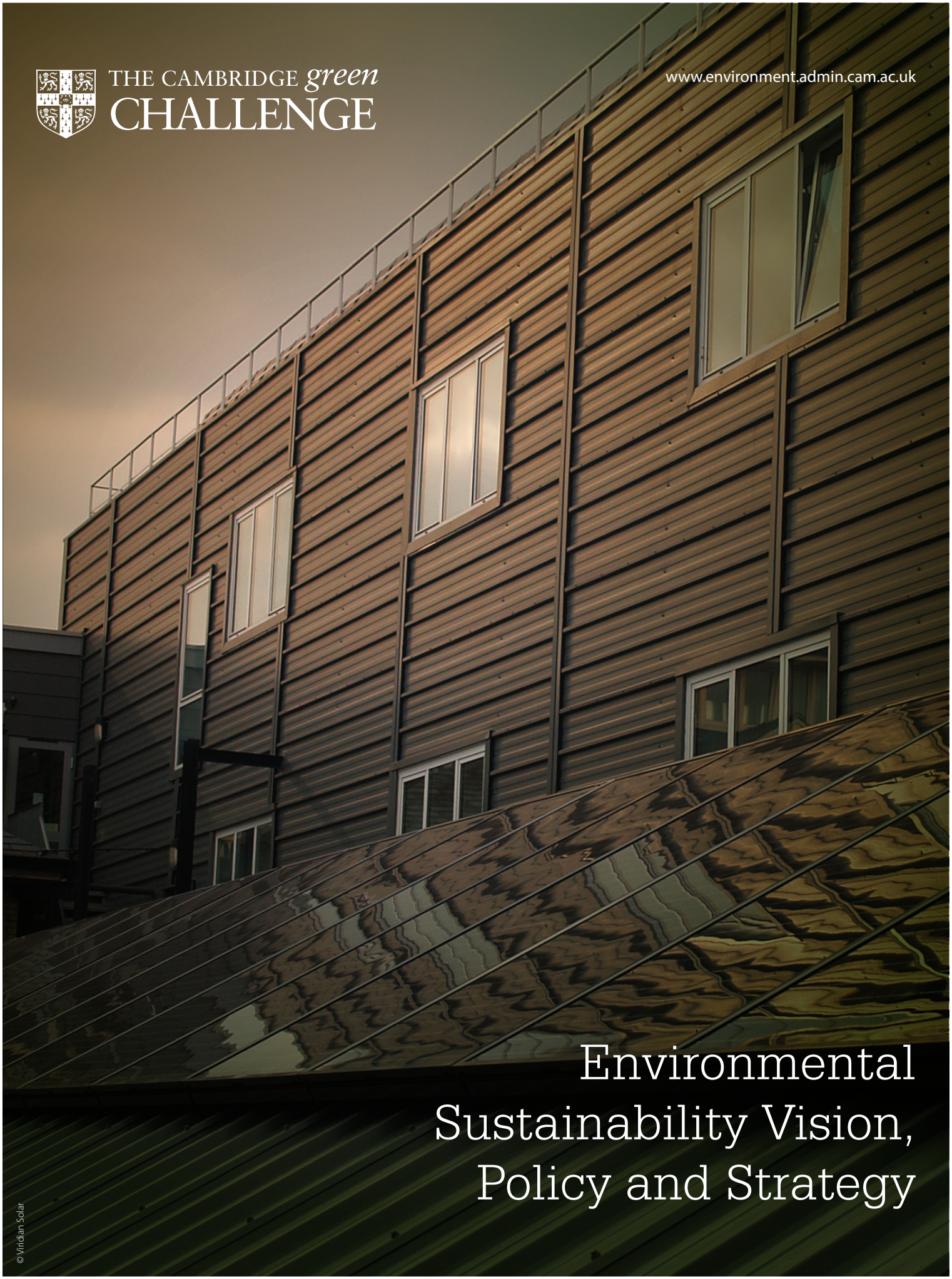
THE CAMBRIDGE green
CHALLENGE
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Environmental
Sustainability Vision,
Policy and Strategy
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Foreword

The University of Cambridge attracts the finest minds from around the world to research and expand the boundaries of knowledge. Much of our research contributes significantly to understanding and solving the environmental sustainability challenges faced by society. In addition, we have a responsibility to ensure that all our graduates have the skills, knowledge and understanding to contribute to a sustainable world. However, enhancing these positive impacts does not give us an excuse to ignore the direct negative impacts of our own operations.

The University of Cambridge is committed to making a positive impact through outstanding environmental sustainability performance. This is a level of ambition that presents a huge challenge that will take time and resources to fulfil. It will mean that the way we deliver some activities will need to be different, many behaviours changed, and projects redefined. Whilst there are risks and initial additional costs involved, there will be long-term benefits and the reputational risk of poor performance will be averted. Our new approach resonates with Cambridge's multi-century scale of vision and provides a focus for action and decision-making. Our performance needs to be benchmarked against peer institutions nationally and internationally.

I fully support our environmental sustainability vision and call upon all members of the University to play their part in achieving the aims and ambitions set out in this Environmental Sustainability Vision, Policy and Strategy.

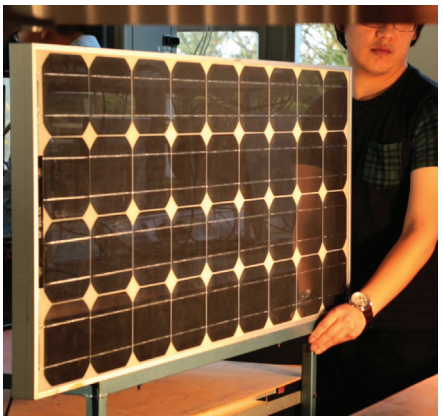
Professor Sir Leszek Borysiewicz
Vice-Chancellor

Introduction

Our Environmental Sustainability Vision is that the University of Cambridge is committed to making a positive impact through outstanding environmental sustainability performance. Our policy framework shows how our environmental sustainability vision aligns with the University mission and one of its core values. It contains four underpinning principles and three priority areas, and conveys the University's key environmental sustainability impacts and the supporting approaches available to manage these impacts.

In order to deliver our policy aspirations, the University will need to implement our multi-step Environmental Sustainability Strategy. This contains details of the aims, targets, key performance indicators and implementation mechanisms relating to the key impacts and supporting approaches. The Environmental Sustainability Strategy will, in part, be implemented through several supporting policies and plans.

The focus of our policy and strategy is the operational aspects of the University of Cambridge. It does not directly apply to the 31 Cambridge Colleges, which are independent institutions with their own property and income, and their own environmental policies and initiatives. However, in implementing this policy the University seeks to work collaboratively with the Colleges to achieve its aims.



Policy framework

Strategy 2015-2020

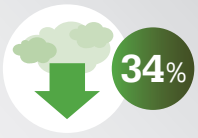
Energy and carbon management

Overarching aim

To reduce scope 1, 2 and 3 carbon emissions while supporting the University's plans for growth in research activity and staff and student numbers.

Targets

To reduce carbon emissions from energy use by 34% by 2020 against a 2005 baseline.



We aspire to a long-term ambition to be carbon neutral from energy use by 2050.

Key performance indicators

- Carbon emissions from **energy use** (tonnes)
- Carbon emissions from **water use** (tonnes)
- Carbon emissions from **energy use** per staff and student (tonnes/FTE)
- Carbon emissions from **water use** per staff and student (tonnes/FTE)
- Carbon emissions from **energy use** per total income (tonnes/£)
- Carbon emissions from **water use** per total income (tonnes/£)
- Percentage of **energy generated** from onsite renewable or low carbon sources (%)

Key implementation mechanisms

- Review of the Carbon Management Plan in 2015 to include the development of a roadmap to carbon reductions and appropriate targets and key performance indicators across all carbon emission scopes.
- Implement energy efficiency and carbon reduction projects within existing buildings through the Energy and Carbon Reduction Project that has an annual budget of £2M.
- Use the Electricity Incentivisation Scheme to provide a financial incentive for institutions to reduce their electricity use.
- Investigate opportunities for strategic estate-wide renewable energy at the University of Cambridge with the aim of increasing the volume of energy generated from onsite renewable or low carbon sources.
- Work with academics with the aim of using their expertise to help solve problems and implement effective solutions.
- Measure the University's scope 3 carbon footprint and develop appropriate metrics to monitor these emissions.
- Monitor and analyse energy and carbon data and provide relevant information to institutions.

Supporting policies and plans

Carbon Management Plan 2010-20

Environmental Management System

Sustainable Procurement Policy

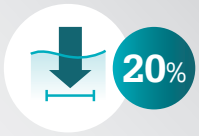
Water management

Overarching aim

To conserve water through efficient use and management.

Target

To reduce water consumption by 20% by 2020 against a 2005 baseline.



Key performance indicators

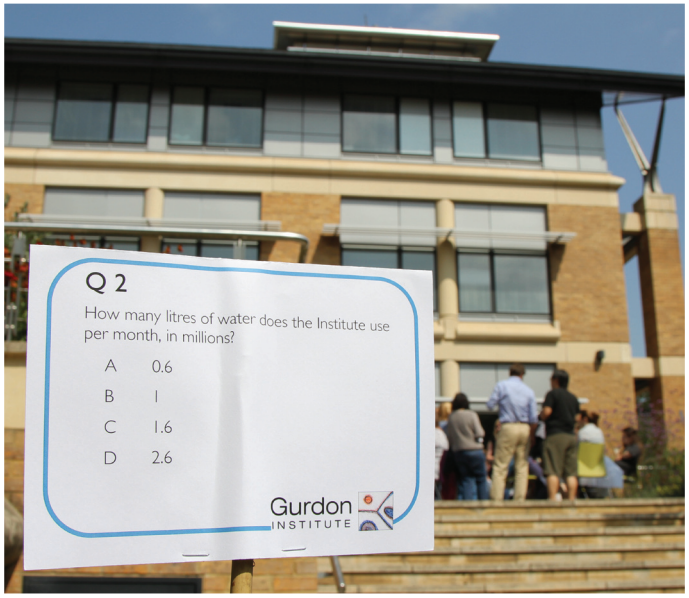
- Total **water consumption** (m^3)
- Total **water consumption per staff and student** (m^3/FTE)

Key implementation mechanisms

- Ongoing monitoring of water consumption data to assist in identifying areas of potential savings.
- Implement a programme of water efficiency projects.
- Seek opportunities for installing water management measures, such as rainwater harvesting and sustainable urban drainage systems.

Supporting policies and plans

Environmental Management System



Biodiversity and ecosystems

Overarching aim

To be a leading organisation within the sector in limiting negative and, where possible, having positive direct and indirect impacts on biodiversity and natural ecosystems so that the University's practical performance in this area matches its aspirations to be a global leader in conservation and food security research.

Target

In the expert opinion of the Ecological Advisory Panel, that no construction, refurbishment or maintenance work on the estate has a net negative impact on biodiversity and that, where possible, the impact is net positive.

Key performance indicators

- Percentage of new buildings and major refurbishments confirmed by the Ecological Advisory Panel as having **no net negative impact** on biodiversity.

Key implementation mechanisms

- Create an Ecological Advisory Panel (with representation from key partners in the Cambridge Conservation Forum) to review and advise on current and planned work on the University's estate that has the potential to have harmful impacts on designated sites or species of conservation concern.
- For the Ecological Advisory Panel to undertake a baseline assessment of existing biodiversity and ecosystems on the University estate and to recommend quick-wins for improving biodiversity (for example, removing invasive plants, incorporating swift nest boxes, reducing frequency of mowing in some areas).
- Development of a Biodiversity Plan by the Ecological Advisory Panel.
- Seek win-win situations for offsetting net carbon emissions and having beneficial biodiversity impacts through tree-planting and wetland creation onsite.
- Develop a Sustainable Food Policy that aims to minimise the indirect biodiversity impacts of the food that we purchase. For example, through adopting Marine Stewardship Council standards and to provide drinking water outlets to reduce or eliminate the need to provide bottled water.
- Preferentially sourcing all timber and paper from Forest Stewardship Council-certified suppliers and requiring our preferred contractors to do likewise.
- Highlight the benefits of purchasing carbon offsets for flights and encourage institutions to purchase offsets for flights used for business travel.

Supporting policies and plan

Biodiversity Plan

Sustainable Food Policy

Sustainable Procurement Policy

Waste management

Overarching aim

To minimise and actively manage waste through elimination, reduction, reuse and recycling.

Targets

To send zero non-hazardous waste to landfill by 2020.

To achieve continuous year-on-year reductions in waste arising per FTE staff and students.

To recycle at least 95% of total waste produced at the University by 2016.

Key performance indicators

- Waste sent to **landfill** (tonnes)
- Waste **mass generated** per FTE staff and students (tonnes/FTE)
- Percentage of waste generated that is **recycled** or **composted** (construction and non-construction waste) (%)

Key implementation mechanisms

- Provision of appropriate recycling infrastructure.
- Use of WARPit, an online system to support reuse of materials and equipment across the University.
- Requirement for Site Waste Management Plans to be developed for all capital projects.

Supporting policies and plans

Environmental Management System


SHUT
THE
SASH


recycle


BROTH
BROTH
GLASS BEADS


ON
OFF
SWITCH
OFF
AFTER USE

Sustainable procurement

Overarching aim

To positively influence the sustainability performance of suppliers and the sustainability credentials of the goods and services that we purchase.

Targets

That central University procurement frameworks are more attractive financially, more environmentally friendly and faster than other routes, and therefore, more institutions use them.

To achieve at least level 4 'Enhance' across all themes of the Sustainable Procurement Flexible Framework by December 2015.

For institutions to consider sustainability criteria within their procurement activity.

Key performance indicators

- **Level achieved** on the Flexible Framework. This framework is a self-assessment mechanism that allows organisations to measure and monitor their progress on sustainable procurement over time.

During 2015, we will also develop appropriate metrics for measuring progress in influencing sustainability performance within our priority commodity areas.

Key implementation mechanisms

- Adopt a Sustainable Procurement Policy covering all aspects of sustainability (environmental, social and economic) and including commitments to procure goods and services that minimise energy use, waste and social impacts. To be publicly available online by 2015.
- Provide appropriate training and guidance to staff within Procurement Services and institutions who are involved in purchasing decisions.
- Develop policies and procedures that promote sustainable procurement and encourage institutions to use these.
- Undertake a Commodity Impact Analysis to identify priority commodity areas and develop plans for our top ten commodity areas by December 2015.
- Develop and implement a targeted supplier engagement programme to promote continual improvements by both suppliers and University purchasers.
- Use the Flexible Framework to monitor our progress on sustainable procurement. In addition to our target to achieve level 4 in 2015, we will consider what would be needed to achieve level 5 'Lead' of the Flexible Framework by 2020.

Supporting policies and plans

Sustainable Procurement Policy

Sustainable Food Policy

Environmental Management System

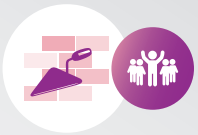
Sustainable construction and refurbishment

Overarching aim

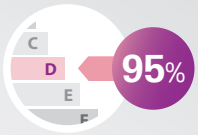
To reduce the environmental sustainability impacts of our construction and refurbishment projects.

Targets

To establish and implement a standard for sustainable construction at the University of Cambridge that is context specific and is considered a leading approach in comparison with our peers.



By 2020, for 95% of buildings (by floor area) to have a minimum Display Energy Certificate rating of 'D'.



Key performance indicators

- The **percentage** of new buildings that are certified at least BREEAM **Excellent** or **equivalent**.
- The **percentage** of buildings that have a minimum Display Energy Certificate rating of '**D**'.
- **External awards** for sustainable construction and design.

Following the review of the University's approach to sustainable construction and refurbishment we will adopt appropriate key performance indicators to monitor the implementation of the new approach.

Key implementation mechanisms

- A strategic approach to the use of the existing estate through more efficient use of space and increasing the use of shared facilities.
- Review of the University's approach to sustainable construction with a revised approach covering new build, refurbishment, fit-out and masterplanning to be adopted in 2015.
- Through the Soft Landings process, monitor the energy consumption of new buildings and compare to the design estimates for at least three years after occupation. Investigate any significant differences and consider appropriate mitigation measures.
- Development of site-specific sustainability frameworks as part of masterplanning work. For example, frameworks are currently in use or under development for the North-West Cambridge Development, New Museums Site, West Cambridge and Old Press Mill Lane.

Supporting policies and plans

Thermal Comfort Policy

Sustainable Construction Policy to be agreed in 2015

Environmental Management System

Travel

Overarching aim

To provide viable and accessible sustainable travel options for staff and students for travel to work, travel at work and travel for work which results in a reduction of carbon emissions.

Targets

At least 75% of staff to be regularly commuting to work by sustainable modes of travel by 2016.

By 2020 to have reduced the per capita carbon emissions from flights by 25%.

Key performance indicators

- **Modal split** for staff commuting (as measured through the annual travel survey).
- **Per capita** carbon emissions from flights.

As part of the review of the University's Travel Plan in 2015 we will develop appropriate performance indicators for travel at work (e.g. between sites) and travel for work (business travel).

Key implementation mechanisms

- Review of the University's Travel Plan in 2015 with the revised Travel Plan covering travel to work, travel at work and travel for work.
- The delivery of sustainable travel incentives and projects to encourage walking, cycling, use of public transport and car sharing. This includes measures relating to a contracted bus service, public transport ticket subsidies, car sharing, car clubs, cycle schemes, cycle parking, electric charging points and personalised travel planning.
- Installation of improved video-conferencing facilities and the provision of support on how to use them.
- Implementation of improved options for staff and students to travel between University sites via sustainable transport.
- Provision of affordable accommodation locally, for example at North-West Cambridge, which reduces the need for travel.
- Travel Expenses Policy which enables employees to choose a more expensive form of transport where the chosen method of transport is less harmful to the environment. Typically this will involve an election to travel by train in preference to car or short haul flight.

Supporting policies and plans

Travel Plan

Environmental sustainability in teaching and research

Overarching aims

To undertake world-leading research that is related to environmental sustainability and to ensure that our operations are informed by this research where possible.

For all staff and students to have access to formal or informal opportunities to develop their knowledge, skills and understanding relating to sustainability matters and solutions.

Key implementation mechanisms

Many of the University's institutions and groups are concerned with academic activity (teaching and research) relating to global challenges and environmental sustainability. This strategy does not attempt to highlight all of them but some specific examples are:

- The University's strategic research initiatives include conservation, energy and global food security.
- Strategic research areas, for example, climate change and materials.
- The Energy@Cambridge initiative, established in 2010 as a University-wide initiative, brings together the activities of over 250 academics working in energy-related research.
- The Cambridge Conservation Initiative is a cross-disciplinary partnership between the University and the cluster of leading conservation organisations in and around Cambridge established to secure a sustainable future for biodiversity and humanity through collaborative programmes of research, teaching, policy and practice.
- Cambridge Forum for Sustainability and the Environment aims to stimulate cross-disciplinary conversations about some of the great sustainability challenges the world faces in the future and the research pathways that will help to prepare for and address those challenges.
- The mission of the University of Cambridge Institute for Sustainability Leadership (CISL) is to deepen leaders' understanding of the social, environmental and economic context in which they operate and help them to respond in ways that benefit their organisations, governments and society as a whole.
- The Living Laboratory for Sustainability provides opportunities for students to use the University estate to test and research real world environmental problems and thereby develop knowledge and skills with the outcomes of their projects feeding back into estate operations.

We aim to make learning opportunities available to all staff and students to develop their knowledge, skills and understanding.

Partnership and engagement

Overarching aims

To facilitate opportunities where staff and students can develop and share their knowledge, skills and experience to engage with and contribute effectively to achieving the University's environmental sustainability aspirations.

To develop formal and information collaborative partnerships with regional, national and international stakeholders.

Key performance indicators

- **Number of institutions** participating in Green Impact.
- **Number of members** of the Environment and Energy Coordinator Network.

Key implementation mechanisms

- Green Impact, the University's environmental engagement and accreditation scheme. It supports and encourages institutions, teams and colleges across the University in reducing their environmental impacts.
- Facilitate active networks of staff and students such as the Environment and Energy Coordinator Network.
- Provide improved information at institutional level to support staff and students in understanding the environmental performance of their own institutions, and to help inform appropriate actions at institutional level.
- Provide appropriate training, both general and role specific, to support staff and students to effectively contribute to achieving the University's environmental sustainability aspirations.
- Deliver regular engagement events, for example Switch Off Week.
- Regular communication with the University community via formal and informal channels to facilitate action at individual and institutional level.
- Actively consult with staff, students and other relevant stakeholders on the development and implementation of operational policies, plans and practices.
- Actively seek formal and informal partnerships and opportunities for collaboration with regional, national and international stakeholders.
- Recognising the symbiotic relationship between the University and the Colleges, seek opportunities to work in collaboration on environmental sustainability initiatives.

Supporting policies and plans

Communications and Engagement Strategy

Arrangements for governance and management

- A Pro-Vice-Chancellor has responsibility for environmental sustainability and carbon emissions.
- The Environmental Sustainability Strategy Committee is chaired by a Pro-VC and reports directly to the University Council and General Board.
- Implementation of this policy is coordinated and undertaken by the Environment and Energy Section within Estate Management.

Monitoring and review

- Bi-annual reports on key performance indicators will be presented to the Environmental Sustainability Strategy Committee.
- An Annual Report will be submitted to the Council and the General Board and other such reports as the Council or General Board may require.
- An annual Environmental Sustainability Report will be published online providing transparency about our approach and progress.
- Our performance will be benchmarked annually against national and international peer institutions.
- The Environmental Sustainability Policy and Strategy will be reviewed regularly taking into account our developing understanding of the scale of challenges, our own performance and emerging opportunities. A full review of the Environmental Sustainability Policy and Strategy will be undertaken in 2020.

THE CAMBRIDGE *green* CHALLENGE

UNIVERSITY OF CAMBRIDGE

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