University of Exeter Climate Strategy 2025 – 2030 [DRAFT]

Summary

The University of Exeter recognises that climate change is a pressing global challenge, and we are committed to leading meaningful action against the climate emergency and harnessing the power of our academic excellence to help create a sustainable, healthy and socially just future.

The objectives of our Climate Strategy are to:

- 1. Achieve net zero with a focus on reducing our scope 1, 2 and 3 emissions at source and only use insetting for dealing with residual emissions (maximum 10%).
- 2. Be a regional, national and international leader in decarbonisation and support delivery of our Strategy 2030 commitment 'to lead meaningful action against the climate emergency and ecological crisis'.
- 3. Foster a whole institution approach, harnessing the expertise, skills, ideas and experience of our University community.
- 4. Seek progress through partnerships, recognising the strength and value of collaboration in addressing global challenges.

Achieving our current 2030 net zero target implicitly relied on a very significant amount of offsetting. Our Offsetting Task and Finish Group, chaired by Professor Peter Cox, concluded that offsetting would not make a meaningful contribution to our efforts to get to net zero and is a dangerous distraction from the vital challenge of reducing our actual emissions. As a result, our revised targets do not include offsetting. Without offsetting, our current 2030 net zero target across all scopes is unachievable. Consequently, we have reassessed our targets and are adopting a whole institution, science-based approach, focused on decarbonisation first.

Our targets:

- *Near-term target*: To reduce emissions by 26% by 2030 for all scope 1, 2 and 3 categories, with the exception of international student out-of-term travel.
- Long-term target: To reduce absolute emissions across all scopes, including international student out-of-term travel by at least 90% by 2050 and use insetting to achieve the balance to net zero.

Our whole institutional approach includes:

- Cultural and behavioural change: Embedding sustainability into University culture as everyone's decisions (individual and organisational) move our collective action towards or away from our strategic goals.
- Reducing our operational emissions: Ambitious plans to reduce our emissions across all scopes, including in the areas of decarbonising our campuses, bought goods and services, business travel, student and staff commuting, sustainable resource management and food.
- *Nature positivity:* Our commitment to nature positivity, which aims to halt and reverse biodiversity loss, is essential for achieving our climate goals.
- Research and innovation: Harnessing the power of our research to make a difference across
 the world and working to reduce the negative impact that our research activity has on the
 environment.

- Formal and informal education: Challenging and inspiring our community of learners to thrive, develop the skills they will need for the future and lead the change the world needs.
- *Progress through partnerships:* Our response to the climate crisis will be stronger through working in partnership.
- Adapting to the impacts of climate change: Being ready to adapt to a world affected by climate change to avoid disruptions to our operations/service.

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1. Introduction

The University of Exeter is committed to leading meaningful action against the climate emergency and ecological crisis (Strategy 2030). We have a reputation as a world leader in climate change research with the UK's top five most influential climate scientists and over 1,500 research and education specialists working on a green future. We were the winner of the Times Higher Education (THE) Award for 'Outstanding Contribution to Environmental Leadership' 2024. We are ranked in the top 10 of global universities in the THE Impact Rankings, recognising universities' contribution to the Sustainable Development Goals (SDGs). Several of our disciplines are recognised in the QS World Subject Rankings 2025, including Environmental Sciences (36th), Geography (40th) and Earth and Marine Sciences (44th).

This Climate Strategy sets out our approach to delivering on our commitment to lead meaningful action against the climate emergency through the power of our education and research, and through reducing our operational emissions.

2. Vision

To lead meaningful action against the climate emergency and ecological crisis.

3. Objectives

- 1. Achieve net zero with a focus on reducing our scope 1, 2 and 3 emissions at source and only use insetting for dealing with residual emissions (maximum 10%).
- Be a regional, national and international leader in decarbonisation and support delivery of our Strategy 2030 commitment 'to lead meaningful action against the climate emergency and ecological crisis'.
- 3. Foster a whole institution approach, harnessing the expertise, skills, ideas and experience of our university community.
- 4. Seek progress through partnerships, recognising the strength and value of collaboration in addressing global challenges.

4. Developing this strategy

In developing this strategy, we have:

Listened to our experts: Through our Advocate Climate Taskforce (ACT) and Climate and Environmental Crisis (CEC) Board, we have used our own academic expertise to inform this strategy.

Learnt from our peers: Through being open and transparent about opportunities and challenges with our peers, we are collectively learning from each other's experiences.

Engaged our stakeholders: We are consulting the University community on this draft strategy.

Used data to inform our approach: Extensive modelling of our emissions helps inform and communicate the scale of the challenge to our stakeholders.

5. Principles

The Strategy is based on the following principles:

- a) Evidence-based: Listen to our experts on which mechanics will deliver real change. Adopt principles set out by the <u>Science Based Targets Initiative</u> (SBTi), ensuring that we achieve our fair share of the <u>Paris Agreement</u>.
- b) Balanced between boldly ambitious and deliverable: Find the balance between responding quickly to the climate emergency and ensuring the long-term sustainability of the University through delivering affordable initiatives. Seek support from our wider community through transparency of approach, transparency of progress reporting and transparency of commitment.
- c) **Engage our community:** Engage our community to exchange knowledge, seek ideas and discuss our approach.
- d) **Consistent and transparent reporting:** Follow the Greenhouse Gas Protocol and Higher Education (HE) Standardised Carbon Emissions Framework (<u>SCEF</u>) to report our greenhouse gas (GHG) emissions.
- e) Be transparent about the reasons behind our decisions: Where we are changing our approach and adopting alternatives to the norm (e.g. offsetting), communicate these decisions openly and widely.
- f) Focus on our positive and negative material impacts: Recognise that our greatest impacts will be through our educational and research activities, but we must still set the right example in our own corporate behaviour.

Figure 1: Highlights from our pathway to net zero



Signed Planetary Health Alliance Committed to divest from direct investments in fossil fuel companies

Launch of laboratory chemical and equipment management system, LabCup

Pathway to net zero

> *Times Higher Education **Professional Services

PROGRESS BY NUMBERS HIGHLIGHTS



Carbon Reduction & Energy Efficiency

- Reduced our scope 1 and 2 emissions by 7% since 2018/19
- 94% reduction in carbon emissions associated with Geography field trips between 2019 and 2025
- Over **3.2 MWh** generational capacity per year from PVs on our campuses
- 6 air source heat pumps installed across our campuses

160 tonnes of CO₂

es of CO₂

saved following installation of air source heat pumps in Cornwall House and the swimming pool An annual saving of

289 H

following completion of phase one of our LED lighting programme

Water

1,1660

water leaks repaired on the Streatham and St Luke's campuses following a SWW survey

Travel and Transport

46% increase in passenger numbers following introduction of an enhanced bus service connecting St David's station and the Exeter campuses

Introduction of Liftshare app has reduced single-passenger journeys by

70,536



Biodiversity

2,320

wildflowers planted across the Penryn campus

Research, Rankings & Education

- UK's top **five** most influential climate scientists
- Over 1,500 research and education specialists working on a green future
- Environmental Science ranked 36th in the World

100%

of lab spaces with **green** accreditations



Waste Reduction & Circular Economy

- 1,300 items have been successfully rehomed through swap shops in Cornwall, saving at least 411kg of resources and nearly 2.5 tonnes of carbon emissions
- Community fridge on the Streatham campus redistributed over 1 tonne of food

8,500 items reused via Giff it, Reuse it

tems reused vid **Gitt it, Reuse i** on our Exeter campuses



Food & Drink

- On the Penryn campus, 37% of our supply chain and 87% of catering and retail suppliers are based in Cornwall and Devon
- 32% of meals served on Exeter campuses were vegan and vegetarian



6. History and context

The University set up a working group in 2019 that produced a <u>Climate Emergency White Paper</u>. As a result of its findings, we declared a climate emergency and adopted a net zero target of 2040. In 2021, our target was bought forward to 2030 following pressure from staff and students, but with the acceptance that meeting it would only be possible with a large amount of carefully considered offsetting in the later years of the timeframe.

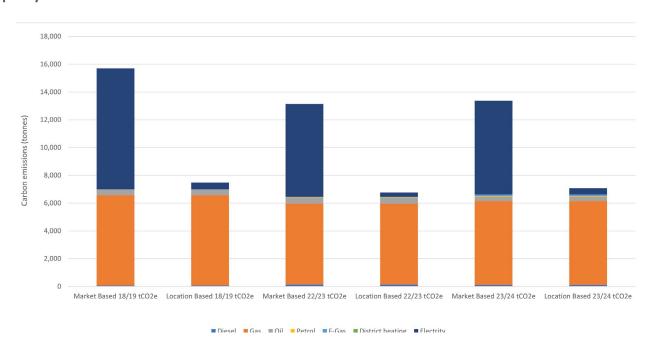
At the time, this was the right decision, and we have made significant progress. However, the context has since evolved and, five years on, it is now the right moment for us to review our target and approach.

Major changes in context include shifting views on the credibility of offsetting and the recommendation of our Offsetting Task and Finish Group that the University should not pursue offsetting plans. In addition, we have added components to our carbon footprint, meaning we are now reporting all aspects of our footprint in line with the HE Standardised Carbon Emissions Framework (SCEF).

7. Progress to date

We have been successful in reducing our scope 1 and 2 market-based emissions by 7% since 2018/19 and have plans to reduce these to zero. Location-based emissions have reduced by 16%. See figure 3. Reducing scope 3 emissions presents significant challenges. These emissions have risen by 16% since 2018/19, primarily due to the University's growth and our use of a spend-based methodology for calculating supply chain emissions. This approach inherently links increased spending to higher reported emissions.

Figure 3: Scope 1 and 2 location- and market-based carbon emissions (tCO₂e) breakdown. The market-based emissions for 2019/20, 2020/21 and 2021/22 are excluded due to poor data quality.



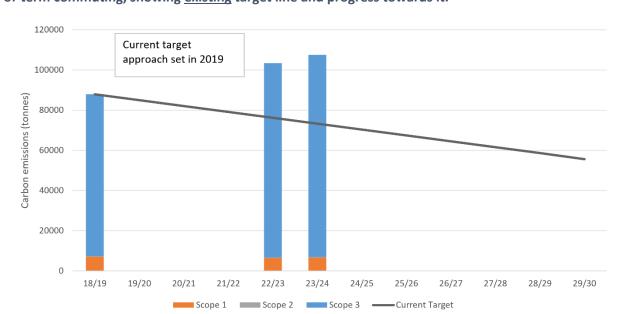


Figure 4: Scope 1, 2 and 3 reported market-based carbon emissions (tonnes), excluding student out-of-term commuting, showing existing target line and progress towards it.

8. Operational boundary and baseline: what is in and what is out?

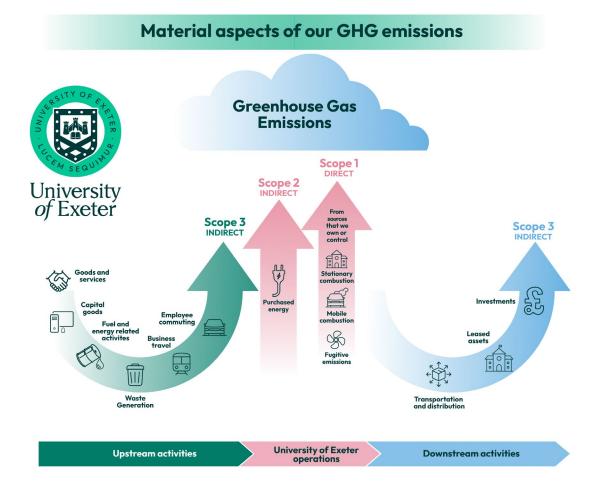
The current 2018/19 baseline provided the most accurate representation of our carbon emissions at the time. It included emissions from our estate, bought goods and services, and business travel. Since then, we have expanded our calculations to include emissions from students' daily commuting, fluorinated gases and, more recently, out-of-term student commuting. Alongside expanding the definition of in-scope emissions, many improvements have been made to the methodology across all areas. Some of these have been applied to historic data where it was feasible, but not all. These improvements have helped to bring us in line with the best practice of the GHG Protocol and HE SCEF.

The 2018/19 baseline data is no longer representative of the University's emissions and should not be compared against, as much of the methodology has been improved and some significant changes introduced which cannot be calculated retrospectively owing to missing information.

We have chosen 2023/24 as our new baseline year because:

- it is a recent relevant year, with no impacts from COVID;
- it contains improved data quality, particularly for the Penryn campus, and elements that have more recently been added to our carbon footprint;
- scope 1 and 2 emissions have been through external assurance, giving us greater confidence in our methodology and this provides a good basis to repeat year on year.

This Strategy covers activities at all our campuses and areas where we have both direct and indirect influence. We have assessed the materiality of our GHG emissions footprint and this Strategy focuses on the key areas of impact and influence.



.Figure 5: Material aspects of our GHG emissions

Scope 1, 2 and 3 emissions

Scope 1 emissions - greenhouse gas emissions that we make directly from sources that we own or control, such as burning fuel in boilers or vehicles.

Scope 2 emissions - emissions we cause indirectly, such as from the generation of electricity, steam, heat or cooling that we purchase.

Scope 3 emissions - includes all the other emissions for which we are indirectly responsible, for example buying products from our suppliers, travel on university business or commuting.

Market-based v location-based reporting

Market-based reporting reflects emissions from the specific electricity our institution purchases. It takes into account Renewable Energy Guarantees of Origin (REGOs) or other energy contracts we have made.

Location-based reporting calculates emissions based on the average emission intensity of the power grid a company is physically connected to. It doesn't matter which electricity contracts the company holds.

Figures excluding international out-of-term commuting:

Figure 6: 2023/24 Greenhouse gas emissions profile (market-based) by category with scope 3 breakdown, excluding international out-of-term commuting

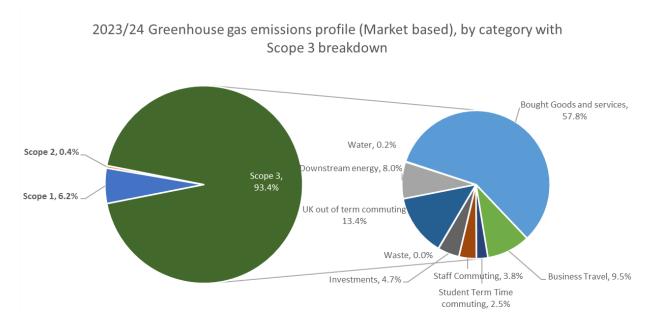
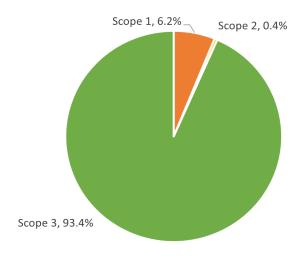
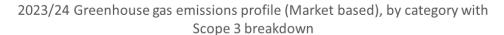


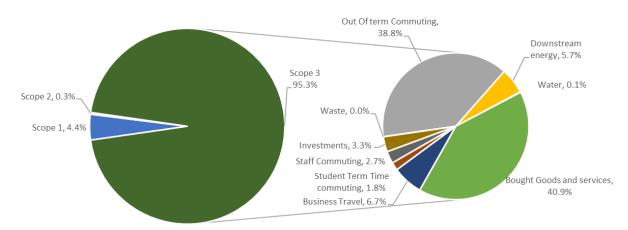
Figure 7: 2023/24 Greenhouse gas emissions profile (market-based), excluding out-of-term international commuting



Figures including international out-of-term commuting:

Figure 8: 2023/24 Greenhouse gas emissions profile (market-based) by category with scope 3 breakdown, including international out-of-term commuting





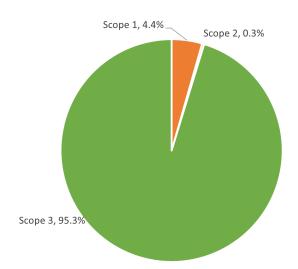


Figure 9: 2023/24 baseline emissions, including international out-of-term commuting

9. Why are we changing our target?

Achieving our current 2030 net zero target implicitly relies on a very significant amount of offsetting. We set up an Offsetting Task and Finish Group, chaired by <u>Professor Peter Cox</u>, to develop the University's offsetting strategy, with that in mind. However, after careful consideration of the issues, the group recommended that the University does not rely on offsetting because of concerns about credibility, permanence and verifiability. They <u>concluded</u> that offsetting would not make a meaningful contribution to our efforts to get to net zero and is a dangerous distraction from the vital challenge of reducing our actual emissions.

As a result, our revised targets do not include offsetting. Without offsetting, our 2030 net zero target across all scopes is unachievable. Consequently, we have reassessed our targets and are adopting a science-based approach focused on decarbonisation first.

Info box 3 Offsetting and insetting

Offsetting: Carbon offsetting relies on organisations 'offsetting' their unavoidable GHG emissions to meet net zero targets by the purchase of carbon credits through voluntary markets. This approach operates on a principle of balancing the carbon ledger externally rather than directly addressing the source of emissions.

Area-based insetting: Focuses on supporting carbon reduction projects within a specific geographic region that is linked to the organisation's sphere of influence, such as the local community or ecosystems surrounding its operations. For example, investing in reforestation, renewable energy infrastructure or regenerative agriculture projects within the local area. These initiatives not only reduce emissions, but can also deliver broader environmental and social co-benefits, including improved community resilience and local biodiversity enhancements.

Value chain insetting: Involves implementing emissions reduction initiatives within an organisation's direct supply chain or operations that are accounted for as part of its carbon inventory. For example, working with suppliers to reduce their scope 1 and 2 emissions, enhancing energy efficiency in manufacturing processes or reducing transportation emissions.

10. Our targets: What do we want to achieve?

Science-based targets are recognised internationally as they are grounded in the latest climate science and support the goals of the Paris Agreement, which aims to limit global warming to 1.5°C above preindustrial levels.

We have developed a set of science-based targets to guide our journey to net zero using the principles of the SBTi's framework. Higher education sits outside of the scope of SBTi validation but by generally following their criteria and recommendations, we have set targets that are robust and in line with current scientific thinking.

In setting these targets we are:

- focusing on decarbonisation first and committing to achieve at least 90% absolute emission reductions across all scopes by 2050;
- not using offsetting and are developing an approach to insetting (see info box) for the residual emissions in 2050, up to a maximum of 10% of our baseline emissions.

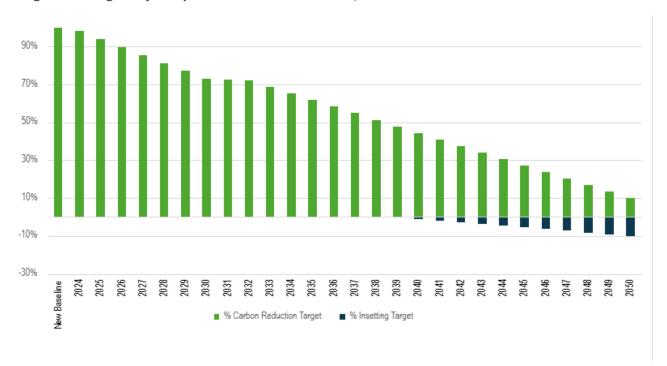
Near-term target: To reduce emissions by 26% by 2030 from 107,536 tCO₂e in 2023/24 to 79,495 tCO₂e in 2029/30 for all scope 1, 2 and 3 categories, with the exception of international student out-of-term travel.

Long-term target: To reduce absolute emissions across all scopes, including international student out-of-term travel by at least 90% by 2050 and use insetting to achieve the balance to net zero.

We also commit to:

- 100% of electricity consumption from renewable sources by 2030
- No new fossil fuel equipment in buildings after 2035. This covers space heating, cooking, power generation and hot water. Backup emergency plant and research equipment are exempt from this requirement.

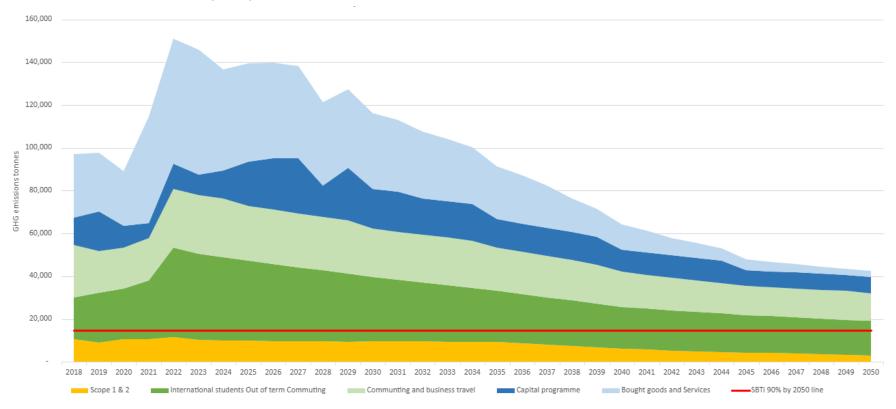
Figure 10: Target trajectory from new baseline of 2023/24



11. Business-as-usual carbon trajectory

We have modelled our business-as-usual carbon emissions to 2050, taking account of our planned growth in students, capital development, Exeter district heat network and wider industry decarbonisation trends. The model uses predictions of the energy grid from the Department for Energy Security and Net Zero, which plan to have a green electrical grid by around 2035 and assumes a moderate build scenario of 20,000m² of additional space. We have taken emissions paths for critical areas of our impact from the Committee for Climate Change 6th Annual Budget. These are mostly used for the impacts of the aviation and manufacturing industries. There are multiple scenarios created for our planning, but we present the moderate scenario in figure 11.

Figure 11: Business-as-usual carbon trajectory



Notes to Figure 11.

- Scope 1 and 2: Emissions relating to our estate and owned fleet. It includes the impacts of the UK greening of the grid and assumes that the proposed Exeter district heating network goes ahead.
- Commuting and business travel: Travel undertaken by students and staff to and from campus. It includes out-of-term commuting which has been included to align with SCEF. Due to the large population of international students, this out-of-term commuting is the dominant element of this section and highly reliant on progress by the aviation industry to decarbonise.
- Capital programme: The impact of our current and proposed construction programme, including the delivery of the St Luke's Campus masterplan and a moderate level of continuous building in the future. It also includes the IT and sustainability capital programmes.
- Bought goods and services: Emissions associated with the wide range of good and services that we buy. The modelling here assumes relevant pathways for each category, or a default manufacturing pathway applied.

The red line is our science-based net zero target of 90% reduction by 2050. This shows that the University will fall short of the target without additional intervention.

12. Our plan: how are we going to get there?

12.1 Whole institution approach

We are taking a whole institution approach to delivering the commitments in this Climate Strategy. We recognise that all aspects of our activities contribute to our carbon footprint and that we have a positive impact as a global leader in climate research and as an educator of future generations. All members of the University community – our staff, students and alumni – contribute ideas, initiatives and enthusiasm.



12.2 Why culture matters for sustainability

There is already significant passion and commitment amongst staff and students to reducing carbon emissions. However, 'leading meaningful action against the climate emergency and ecological crisis' involves a shift in the actions and behaviours of all members of the University. Although we have set an institutional response, our ambitious goals can only be achieved through individual participation. Everyone's decisions (individual and organisational) move our collective action towards or away from our strategic goals.

To achieve individual participation, we are developing a Culture Change Programme, which aims to shift individual values, behaviours and ways of working to align with our strategic and sustainability goals. The long-term value is to cultivate sustainable transformation by embedding desired attitudes and practices into daily operations and mindsets so sustainable behaviours can become the new norm. We will continue to build upon the foundations and good practices we have invested in already, and the Culture Change Programme will become the formal mechanism to collate these developments.

To help evolve our approach, we are setting up a working group of internal experts, including from anthropology, geography, psychology, life sciences, HR and EDI. This will help inform the tools and methods to deliver the Programme. This unified approach across faculties and departments will allow us to accelerate progress and combine our efforts towards our strategic goals. It ensures that we are reaching individuals as well as fostering a sense of collective purpose. This will in turn shape the Communication and Engagement Strategy to ensure messaging is salient and relevant to each target audience.

12.3 Research and innovation

As a Russell Group university, we are at the forefront of ground-breaking research that is making a difference across the world. By breaking down barriers between disciplines, we are tackling the most pressing challenges of our time, from both human and physical perspectives. Through collaborations with global institutions, policymakers, businesses and organisations, we are harnessing the power of our research to create a sustainable, healthy and socially just future.

At Exeter, we are home to the UK's top five most influential climate scientists (Reuters Hot List) within a team of over 1,500 researchers and professionals working across climate change and the environment. This expertise underpins our research across a range of areas, including green futures, healthier oceans and positive tipping points.

Further information is available at https://www.exeter.ac.uk/research/greener/.

Global Systems Institute

The Global Systems Institute harnesses this expertise with other global change researchers in the University and beyond, bringing them together with industry, policymakers, students, NGOs, citizens and other stakeholders to tackle shared problems. We provide thought-leadership and action-orientated research to drive systems-based solutions to the climate and biodiversity crises.

Circular economy

The University of Exeter Business School is a leading centre of excellence in the UK, shaping the future of the circular economy through our unique approach that combines management expertise with science and engineering-led research.

We focus on real-world impact through partnerships with businesses, governments and NGOs. Our research goes beyond theory, delivering practical solutions for businesses to adopt and implement, empowering the next generation of circular economy leaders.

Top award for climate leadership

We secured the <u>Outstanding Contribution to</u>

<u>Environmental Leadership</u> prize at the THE Awards in November 2024. The judges praised Exeter's "global reach in communicating high-quality and leading research in environmental science and climate change observation."

Positive Tipping Points

Our <u>research</u> highlights the growing threat of "tipping points" that could accelerate the climate crisis. We are also identifying sources of hope: Positive Tipping Points, that could combine into cascades of positive change

We continue our work to reduce the negative impact that our research activity has on the environment.

Concordat for the Environmental Sustainability of Research Innovation and Practice: We have signed the Concordat for the Environmental Sustainability of Research and Innovation Practice, which represents a shared ambition for the UK to continue delivering cutting-edge research, but in a more environmentally responsible and sustainable way.

Sustainable Labs Programme: Initiatives include:

- implementing green accreditations in all relevant specialist spaces from wet laboratories to digital spaces, dry labs and workshops;
- encouraging opportunities for shared equipment and using Products-as-a-service models, including the utilisation of existing systems to better manage these processes;
- redevelopment of the Sustainable Labs Resource Hub to provide guidance, resources and signposting to cover all aspects of sustainability. It will also facilitate the delivery of the Sustainable Labs induction;
- investigating innovative reduction, reuse and recycling practices within specialist laboratory spaces.

Research footprinting tool: We have developed a tool to estimate the carbon emissions associated with research projects. By identifying the areas of our research with the highest negative impact, the tool empowers individuals to focus on solutions for reducing these. Our researchers will then collaborate with the University to adopt low-carbon research practices, driving meaningful change. With funding secured from the Wellcome Trust, we are developing and piloting the tool for a national rollout in partnership with the universities of Bath, Bristol, Cardiff, Edinburgh, LSE and QMUL.

Embedding into strategies: Decarbonisation, and sustainability more generally, is embedded into our Research and Impact Strategy and <u>Technical Strategy</u>.

Controlled Temperature Management Policy

We published our Controlled Temperature Management Policy in November 2023, with the aim of optimising capacity, ensuring safety and working as sustainably as possible. Less than 12% of the University's ULT freezers are now held at -80°C, and we are working to reduce this further.

Laboratory Efficiency Assessment Framework (LEAF)

LEAF launched in 2020 and in 2022 the University of Exeter became the second institution to achieve 100% bronze accreditation in all applicable spaces, with many labs progressing on to silver and gold.

The LEAF criteria were updated in January 2025, and we aim to have updated accreditations in all applicable spaces. We are also seeking alternative accreditations for spaces unsuitable for LEAF.

Sustainable Lab of the Year Awards

CREWW labs were awarded Sustainable Lab of the Year at the Lab Innovations Awards. Their exceptional sustainability initiatives and rapid attainment of Laboratory Efficiency Assessment Framework (LEAF) Gold demonstrates industry leadership, setting a benchmark for excellence in sustainable practices.

ACCESS Network Guiding Principles

The Advancing Capacity for Climate and Environment Social Science (ACCESS) Network have published <u>Guiding Principles</u> for environmentally sustainable, inclusive and coproductive research practice, which offer a framework for sustainable research practice.

12.4 Formal and informal education

We will challenge and inspire our diverse community of learners to thrive, develop essential skills for the future and lead the change the world needs.

The Education Thematic Forum is chaired by our Sustainability Education Advocates and leads projects and initiatives to embed sustainability education across our formal and informal curriculum.

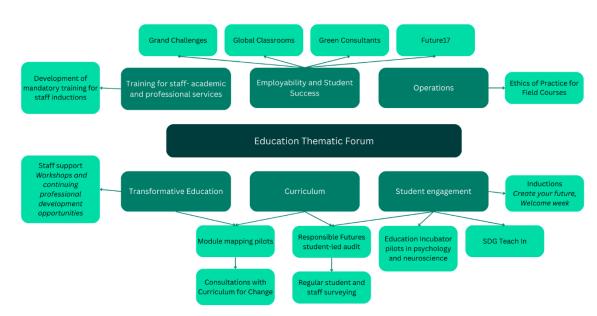


Figure 12: Overview of Education Thematic Forum sustainability work

Curriculum for Change: Curriculum for Change is working to realise our strategic commitment to develop a distinctive and sustainable model for education by 2030. Through this programme, we are embedding the knowledge and skills that our graduates need to respond to the climate crisis within our curriculum via:

- A review of all undergraduate programmes and modules using co-created course and assessment design principles
- The establishment of 'minor pathways' open to all undergraduate students, to include a minor on sustainability
- The development of skills classification, which incorporates sustainability literacy, against which programmes can be mapped.

Transformative Education Framework: Introduced in 2021, the Transformative Education Framework (TEF) supports educational initiatives relating to its three pillars: Inclusive Education, Racial & Social Justice and Sustainability. Under the Sustainability pillar, the TEF is working to embed the UN SDGs, promote social and ecological change and address climate change throughout the curriculum.

Responsible Futures: The University of Exeter, Exeter Students' Guild and Falmouth and Exeter Students' Union have been awarded joint <u>SOS-UK Responsible Futures</u> accreditation. This accreditation reflects a shared commitment by the institutions and student unions to embed holistic sustainability across the curriculum and campuses.

Green Consultants: A <u>programme</u> designed to provide students with the additional skills and experience required to work in the highly competitive environmental and sustainability sector. The

programme involves three key elements: training, a live project contributing to the University's net zero goal, and an internship with an external organisation.

Grand Challenges: A project week in which participants work in interdisciplinary groups with other students to design innovative solutions to real world challenges. All of the <u>Grand Challenges</u> topics link to the UN SDGs.

Internships and placements: We employ student interns to work on projects that support the delivery of this Strategy and the University's broader sustainability commitments. In addition to offering paid positions, we also support students on credit-bearing placements, including dissertation research.

Future 17

The University of Exeter and QS are partners in delivering this first-of-its-kind global initiative

- Future17 – that unites multinational organisations, a consortium of leading universities and teams of students to participate in projects that aim to advance the UN SDGs.

SDG Teach In

The University of Exeter ranked as the top university for the number of students reached in the 2024 <u>SDG Teach In</u>. We also ranked 6th (3rd among universities) for the number of educators pledged.

12.5 Reducing our operational emissions: scope 1 and 2 emissions

Our Infrastructure Decarbonisation Masterplan (IDM) focuses on reducing our scope 1 and 2 emissions across our campuses.

Improving the energy efficiency of our buildings:

We will continue our programme of building energy efficiency improvements, including LED lighting replacements, fabric improvements and heating/ventilation controls.

Making efficient use of our space:

Review our space usage to identify opportunities for greater efficiency and rationalise our portfolio.

Smart campus:

Development and delivery of a smart campus strategy that will monitor and control energy usage, enhance space utilisation and reduce energy demand.

Electrifying our fleet:

70% of the University's fleet is already electric and we plan to transition to 100%. Achieving this relies on being able to source suitable specialist vehicles and will be supported by the roll-out of charging infrastructure.

Increasing onsite generation:

We are reducing our reliance on grid-supplied electricity through the development of rooftop PVs on all our campuses and a 1MW PV array feeding Streatham campus. We plan to maximise PVs on our rooftops and car park canopies and to develop wind alongside our Penryn campus.

Decarbonising heat:

We are a major partner in the development of the Exeter Energy Network which will supply zero-carbon heat to our Exeter campuses. We hope to have 25% of our Exeter campuses connected to this network by 2030.

Decarbonising our electricity supply:

While our focus is on reducing consumption and maximising our own generation, we will need to source a reasonable proportion of our electricity from the grid. We will increase the proportion of our electricity supplied by a Power Purchase Agreement (20% in 24/25) or Renewable Energy Guarantees of Origin (REGO) backed tariffs.

Reducing fugitive emissions:

Replacing heating, ventilation and air conditioning systems that use F-gas refrigerants with alternatives where possible.

Duryard PV Array

The Duryard PV array connected into our electricity network on Streatham campus is generating over 1,000 MWh of renewable energy per year – equivalent to providing electricity to over 250 domestic households – and save 225 tonnes of CO₂ annually.

Rooftop PVs in Exeter

We currently generate 1 MWh through our installed roof-mounted PV and have plans to increase this to over 3 MWh via the installation of further rooftop and car park canopy-mounted PV.

PV at Penryn

The Penryn PV network is helping us avoid around 169 tCO₂e each year, contributing to a massive 60% decrease in our energy emissions against the Penryn 2005 baseline.

LED lighting programme

The first phase of our project, completed in July 2024, replaced fluorescent lighting with energy-efficient LEDs across eight buildings, resulting in an annual saving of 289 tCO₂e. The next phase, beginning in August 2025, will extend these upgrades to all remaining buildings, achieving an additional annual saving of 550 tCO₂e. The project also includes a smart lighting control system that shares valuable data – such as occupancy and room daylight levels – with other control platforms.

12.6 Reducing our operational emissions: scope 3 emissions

12.6.1 Travel

With 30,000 students and 6,000 staff, our travel emissions are a significant part of our overall footprint.

Business Travel

Travel Policy: Our <u>Travel Policy</u> aligns all business travel with our commitments to achieve net zero by setting out expectations for low carbon travel, including considering whether travel is essential, a preference for train travel over air travel, and class of travel.

PS Connect Travel project: An end-to-end review of our policies and processes for booking travel, aiming to improve service experience, increase compliance with travel policies and reduce scope 3 emissions.

Train travel: The Enabling Rail Travel Task and Finish Group have identified the barriers preventing more staff from traveling by train and have made several recommendations. We will work collaboratively across the University to implement these recommendations.

Local targets: Faculty/PS targets for reducing carbon emissions from business and field trip travel encourage action at the local level, including increased focus on matters such as considering whether travel is essential, frequency of travel, size of delegations, and maximising value when travel is undertaken through delivering multiple purposes/objectives.

Field courses

The Field Course Task and Finish Group's work on developing a set of guiding principles to make practices more environmentally sustainable, inclusive and accessible has already supported two low-carbon (by rail) final year undergraduate field courses in Geography.

By 2026, all Geography undergraduate field courses will be no-fly, resulting in a 75% overall carbon saving in field trip emissions, when compared to flying to these destinations.

Staff and student commuting

Our <u>Sustainable Transport Strategy 2024-2030</u> addresses commuting journeys undertaken by staff and students. It aims to reduce carbon emissions by disincentivising single-occupancy car use and promoting active travel, such as walking and cycling, public transport and shared mobility schemes. Collaborating with regional partners, such as local councils and transport operators, will be key to advancing sustainable transport infrastructure and initiatives.

Active travel: We will continue to improve pedestrian and cycling infrastructure by developing safer routes, secure bike parking and better facilities, such as showers and lockers. Additional incentives, including free safety checks, subsidised cycling equipment and e-bike charging points, will further support walking and cycling.

Public transport: We are working in partnerships with local providers to ensure better services and discounted or subsidised tickets. We are also investing in technology to support multimodal and integrated transport systems, including real-time travel information displays, apps and ticketing solutions.

Shared mobility: Options will be expanded through car-sharing platforms, e-cargo bikes and collaborations with local authorities on shared transport services.

Single-occupancy car travel: Reducing emissions associated with single-occupancy car travel through improvements in parking policies, provision of additional EV charging points and incentives for car sharing.

Free bus travel for staff

In partnership with Stagecoach, we offer free bus travel for University staff between St David's train station and our Exeter campuses. Free travel is now available at a 15-minute frequency throughout the working week and has resulted in a significant increase in passenger numbers.

Liftsharing

The Liftshare app enables staff to car share and access free parking at our Exeter campuses. It has reduced emissions by 13.86 tCO₂e and saved 70,536 miles of single-passenger journeys in 2023/24.

Student out-of-term commuting

This is travel by our students from their out-of-term ('home') address to their term-time ('university') address. While these emissions account for over a third of our carbon footprint, and the majority of this is associated with international students, there are significant positive financial and social benefits from a diverse national and international student population. We monitor and report emissions from this category as part of our annual reporting and are identifying initiatives to will help reduce these emissions, for example:

- Improved understanding of out-of-term commuting through annual surveys to collect data on travel patterns, emissions and preferences, allowing for more accurate reporting and targeted interventions over which we can influence;
- Identifying actions that could support students to travel less and/or adopt lower-emission transport options;
- Diversification of education delivery via initiatives, such as Transnational Education (TNE) and increased online delivery of courses that will enable us to grow student numbers at a lower rate of carbon emissions.

12.6.2 Bought goods and services

Bought goods and services are a significant part of our emissions and one we are working hard to improve. We are committed to procuring goods, services and works responsibly, in a way that enhances and protects our environment, economy and society. A crucial part of this is reducing the amount that we buy – a central component of a circular economy.

Responsible Procurement Strategy: We have launched our Responsible Procurement Strategy that challenges buying behaviours and establishes minimum criteria for responsible procurement in contracts, ensuring that procurement decisions align with sustainability goals.

Supplier engagement programme: Supporting the supplier engagement strategy to build partnerships and drive collaborative efforts to reduce emissions across the value chain. This includes conducting

supplier workshops and training sessions in collaboration with other institutions, focusing on reducing all scope emissions, promoting sustainable products and circular economy principles.

Centralised purchasing: Our buying model for transactions between £2,500 and £49,999 helps improve efficiency and identify responsible procurement criteria. This approach enhances oversight, sustainability and data insights for future procurement decisions.

High impact commodity categories: Through our sustainable risk matrix, our subcategory plans identify opportunities to reduce our impact on our high impact commodity categories, ensuring we explore all opportunities to reduce the amount we buy as well as embedding sustainability within these supply chains.

Developing the capability of our staff

We are developing the skills and knowledge of staff involved in procurement by providing access to HEPA's sustainable procurement training and the Business School's Circular Economy Masterclass.

12.6.3 Circular economy and resource management

Our <u>Circular Economy and Sustainable Resource Management Strategy 2024-2030</u> prioritises waste prevention, zero waste to landfill, recycling, reuse and natural regeneration. This Strategy aligns with the University's broader sustainability goals and incorporates a range of initiatives designed to embed circular economy principles across operations, procurement and campus culture.

Project RESCUE: A storage and reuse centre aimed at retaining the value of surplus furniture and equipment for repurposing and reuse.

Equipment sharing: Promoting shared equipment and reuse schemes, leasing models and products-as-a-service to reduce unnecessary resource consumption.

Reducing single-use plastics: Working to further reduce the use of single-use plastics and phase out non-recyclable items like disposable cups and lab materials.

Working in partnership: Working with the <u>Exeter Centre for Circular Economy</u> to identify new opportunities to embed the circular economy within our operations and to drive innovative solutions.

Improving recycling rates: IT equipment refurbishment, enhanced recycling infrastructure and an ambitious zero waste to landfill target are key priorities. Behavioural change is being encouraged through improved communications, training and signage.

Gift it, Reuse it

Outgoing students can donate home essentials for incoming students the following September, free of charge. In its first year over 8,500 items (1,623kg) were prevented from entering waste streams.

Warp It

The Warp It reuse platform continues to grow in use. In 2023/24, there were 250 transactions which avoided 7,874 kg of items going to waste and saved 89 tCO₂e.

12.6.4 Capital programme

Investing in our estate and ensuring that our facilities meet the demands and expectations of our community is a key element of the University's strategic operations. Construction remains one of the most carbon-intensive areas of any organisation, and particularly so for those institutions that maintain an ageing estate.

Sustainable Design Standard: Our Sustainable Design Standard (being updated in 2025) informs sustainable design and construction specifications across all projects. It includes a commitment for all new-builds to be Passivhaus, all whole building refurbishments to achieve EnerPHit, and for all major construction and refurbishment projects to reduce, calculate and report embodied carbon emissions. Calculating project-specific embodied carbon emissions supports accurate carbon accounting, which is typically considerably lower than the alternative 'spend-based' approach (approx. 1/5th), and is reflected in the modelled carbon trajectory.

Space management: Constructing new buildings is particularly carbon intensive – both through the embodied carbon associated with the materials and construction, and the operation of the building. Ensuring efficient and effective use of our estate, and consequently reducing the amount of new development required, will significantly reduce carbon emissions. This is supported by strategic decisions on the use of space, insights gained from our smart campus programme, provision of supporting systems, such as desk booking, and maintenance of our space records.

Sarah Turvill Multifaith Centre

A flexible and inclusive Multifaith Centre in the heart of Streatham campus. Sustainability and reducing carbon emissions were fundamental, both to the design and the construction of the building, which achieved Passivhaus certification for its energy efficiency, carbon reduction and air quality. The building is constructed from energy efficient porotherm blocks and includes air source heat pumps and rooftop solar panels.

West Park Student Residences

The University is seeking to increase student accommodation on Streatham campus by building new and refurbished student living facilities that provide an excellent on-campus living experience. It is expected to become one of the UK's largest Passivhaus student accommodation and enhancing biodiversity and ecology in the area is an important aspect of the project.

12.6.5 Food

Our <u>Sustainable Food Policy and Action Plan</u> sets out our approach to reducing carbon and environmental impacts by promoting informed choices rather than restricting options.

Reducing consumption of ruminant meat: Increasing the quantity and variety of plant-based meals and drinks and a "meat-second" approach on menus, which places plant-based options as the primary choice. Reducing overall meat content within recipe cards through the addition of items such as protein substitutes, pulses, grains and sauces.

Reducing waste: Reducing plastic usage, using compostable packaging, minimising packaging and

placing a charge on disposable cups to encourage reusable alternatives.

Our supply chain: Prioritising locally sourced produce from suppliers that meet exacting standards for sustainability and ethical practices and reducing food miles.

Engagement and education: Promoting sustainable food by enhancing consumer information, highlighting seasonal produce and actively engaging with staff and students through cooking demonstrations, food-related cultural events and campaigns such as Veganuary.

Further information is available on our Sustainable Food and Drink Initiatives page.

Kitchen garden

Our in-house kitchen garden uses both traditional planting and hydroponics to provide fresh, sustainable produce year-round, promoting local, campus-grown food. Through research and collaboration, we're aiming to use the kitchen garden to find new and innovative growing methods and techniques.

Sustainable Restaurant Association

We received a three-star rating — the highest possible grade — in the Sustainable Restaurant Association (SRA) Food Made Good Sustainability Standard.

2023/24 in numbers

11% of all milk used was plant-based.

32% of total meals served were vegan and vegetarian options, a 22% increase on the previous year.

49% of all hot drinks were served in reusable cups.

52% of all meals served during Veganuary were vegan.

12.6.6 Investments

The reporting of investments as part of our carbon footprint includes Pensions and our Investment portfolio through Rathbones. We excluded any cash in bank and spin-out companies as they are not considered able to be influenced.

The University's <u>Investment Policy</u> commits us to only investing in entities that exhibit best class standards of behaviour and performance in a broad range of environmental, social and governance (ESG) issues, using both positive and negative screening methodologies developed and deployed by its fund managers. This excludes investment in entities that are involved in the extraction of fossil fuels, subject to a turnover cap of 5%.

An Endowment and Investment Group, including the Presidents of the two student unions (or their nominees), has oversight of the endowment, monitors the performance of our fund managers and is involved in periodic review of our policy.

12.7 Progress through partnerships

Our response to the climate crisis will be stronger through working in partnership.

The Guild and Students' Union (SU): Working with our two student unions to listen to the voices of our students and harness their passion and determination.

Falmouth Exeter Plus (FX Plus): In Penryn, our campus is shared with the University of Falmouth and FX Plus manages and delivers services on this campus on behalf of both universities. We work closely with FX Plus to ensure that our commitments are delivered across all our campuses.

Sector networks: We engage with a wide range of sector groups and networks to advance higher education's response to the climate crisis. A few examples include the <u>EAUC</u>, the <u>UK Universities</u> <u>Climate Network</u>, the <u>International Universities Climate Alliance</u> and the <u>Laboratory Efficiency</u> <u>Assessment Network (LEAN)</u>. Exeter representatives also sit on key sector committees, including the steering group for the Concordat for the Environmental Sustainability of Research and Innovation Practice and the AUDE Sustainability Advisory Group.

Regional partners: Working with regional stakeholders through, for example, Civic University Agreements (CUA), the Exeter Partnership, the Cornwall Climate Commission and the Devon Carbon Plan, to deliver decarbonisation within the regions where we operate.

Strategic partnerships: The University collaborates with a wide range of partners. Our Partnership Principles have been developed to guide our decisions on the agreement of any new partnerships that we enter into. They ensure that our partnerships align with our core values and the goals of Strategy 2030, ensuring they reflect our commitment to use the power of our education and research to create a sustainable, healthy and socially just future.

Local community: The Exeter Community Panel is helping us to embed the broader community voice in the University's Civic University Agreement activities. The <u>Friends of Hoopern Valley</u> supports our management of the Lower Hoopern Valley and promotes community engagement and education around environmental stewardship.

Green Futures Solutions

Alongside world-class scientists, businesses, entrepreneurs, governments and NGOs, we are connecting our thinking to create solutions that can affect the real and lasting behavioural change the world needs to see.

Civic University Agreement

We are a partner to three <u>Civic University</u>
<u>Agreements</u> with Exeter, Cornwall and Devon and Torbay. These Agreements establish how the University will work in partnership with other anchor institutions in the region to help find solutions for society's most pressing problems.

12.8 Our approach to insetting

We are developing an approach to insetting as an alternative to using offsetting. We will use value chain insetting by working with our supply chain to reduce our scope 3 carbon inventory. For example, working with suppliers to reduce their scope 1 and 2 emissions, such as through engagement initiatives to support them with net zero plans, or through funding and incentives for low carbon solutions.

We are exploring opportunities for area-based insetting (maximum 10%) to get to net zero by 2050. Area-based insetting focuses on supporting carbon reduction projects within a specific geographic region that is linked to our sphere of influence, such as the local community or ecosystem projects which will enhance local resilience and support a just transition to a low carbon future. Projects will include supporting community renewable energy, retrofit and sustainable transport. We are also investigating nature-based opportunities, such as reforestation, woodland expansion and regenerative agriculture in partnership with academic colleagues and landowners. We will collaborate with our partners and the local community to support projects which align with local and regional strategic goals.

We remain committed to working with partners to conduct research on robust approaches to carbon removal and associated co-benefits which may enable effective carbon offsetting in future. We are actively researching innovative and responsible carbon dioxide removal (CDR) methods to enhance the rigor and accountability of these approaches worldwide.

12.9 Adapting to the impacts of climate change

Climate change is already causing more frequent and intense extreme weather events, changing rainfall patterns and rising sea levels, which threaten human health, infrastructure, and economic activities. We need to be ready to adapt to a world affect by climate change to avoid disruptions to our operations/service.

To evaluate our resilience to climate change, an Adaptation Task and Finish Group will harness our internal academic expertise alongside knowledge of relevant professional services teams. The outputs of this evaluation will be used to develop an adaptation plan. This will include:

- an assessment of risks, opportunities and impacts from climate change;
- identification and implementation of relevant actions required to address the identified risks in partnership, including consideration of actions that give rise to co-benefits;
- seek opportunities for innovation and development.

12.10 Modelled carbon trajectory

We have modelled how the implementation of our planned interventions will reduce our business-as usual carbon emissions and enable us to meet our new targets.

Figure 13: Near term target with planned interventions. Carbon emissions to 2030 with additional interventions from the University, excluding out-of-term commuting. The proposed start date for the Exeter heat network is 2026 and with buildings switching over from over from mid-2028.

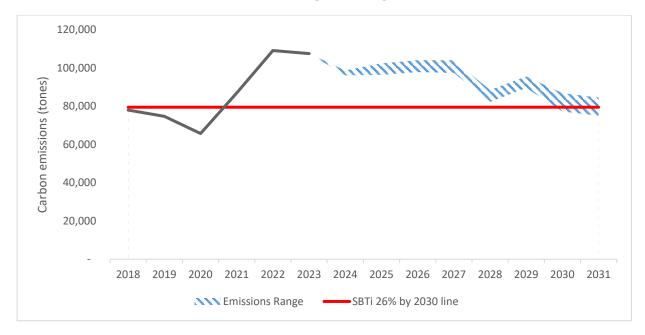
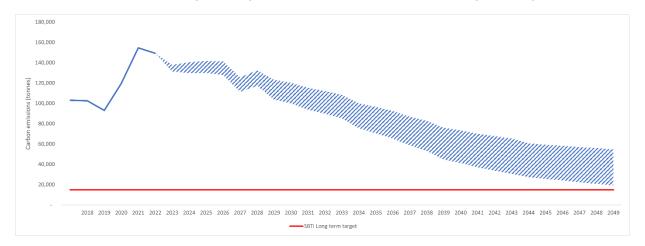


Figure 14: Long term carbon emissions with additional intervention from the University. These models assume student and spend stay consistent in line with the University's latest predictions.



12.11 Nature positivity

Nature plays a crucial role in mitigating and adapting to climate change, and biodiversity loss exacerbates climate impact. Our commitment to nature positivity, which aims to halt and reverse biodiversity loss, is essential for achieving our climate goals, and vice versa. Our Nature Positive Strategy 2024-2030 sets out our plans for achieving nature positivity and meeting our commitments under our Nature Positive University pledge.

13. Mobilising this plan

Staff resources: Implementation of this Strategy will be delivered by the University's <u>Sustainability</u> <u>team</u> along with colleagues across the institution, many of which have sustainability embedded within their job roles.

Our Faculties and Professional Services have set up their own Sustainability Committees and have developed sustainability plans focused on what they can control, influence and change at the local level.

Financing: The delivery of this Strategy will be funded from internal capital and revenue budgets. In addition, we will seek opportunities for alternative financing options including government grants, charitable foundations and funding, green finance loans, community investment and third-party investment through, for example, Energy Performance Contracts.

We are investigating the adoption of an Internal Carbon Price (ICP). This internal mechanism would be cost-neutral and would transfer funds from high carbon activities to low carbon alternatives, acting as a decision-making aid to incentivise carbon reduction efforts. For example, an internal levy could be applied to flights with the funds used to support decarbonisation efforts, including subsidising low carbon travel if this is more expensive.

We have a <u>Sustainability Projects Fund</u> to support ground-up sustainability projects across the University.

14. Key challenges and dependencies

Decarbonisation of other sectors: Our rate of decarbonisation relies heavily on the progress of other sectors in decarbonising, for example, aviation and our supply chain.

Reducing emissions while maintaining a global presence: Our Global Exeter 2030 Strategy lays out the University's vision to be a truly global institution by extending our presence, reach and impact around the world. It seeks to realise Exeter's ambitions to be an internationally recognised leader in human health and wellbeing, sustainability and social justice. We recognise that there are tensions and opportunities between our Global Strategy and this Climate Strategy, and we are openly discussing how we can deliver our mission to use research and education to deliver impact, while aligning with our net zero commitments.

Overcoming cultural & change resistance: We recognise that successful delivery of this Strategy depends on high participation from all members of the University. To achieve our goals, we need collective alignment, with everyone contributing in different ways.

We take a mindful approach to identifying barriers, such as: gaps in education, skills and training; inadequate policy adaptation; insufficient environmental and operational support; and poor leadership, modelling and communication.

These challenges can hinder progress toward our strategic goals. To support the Climate Strategy, we have carefully considered the cultural factors needed for success. The Culture Change Programme will be developed alongside to identify and address barriers to change while educating and reinforcing the benefits of a fairer, greener and healthier future for all.

Improved data quality: We currently rely on spend-based calculations to measure our scope 3 emissions from bought goods and services, meaning an increase in spending leads to a corresponding rise in emissions. We require accurate activity-based emissions data from our strategic suppliers to improve our reporting of scope 3 emissions. This is dependent on each industry's maturity in carbon data collection.

Delivery of heat network: Our projections for decarbonisation assume that the <u>Exeter Energy Network</u> is delivered with an affordable price of heat and a zero carbon-intensity.

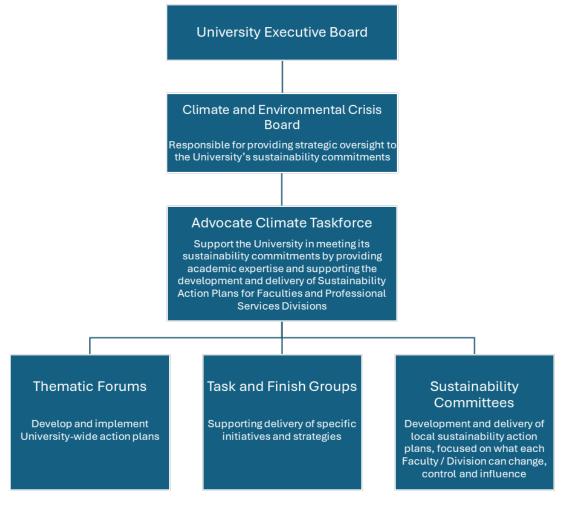
Availability of market-based renewable energy options: Achieving a renewable zero-carbon electricity supply relies on the availability of competitive Power Purchase Agreements (PPAs) and/or Renewable Energy Guarantees of Origins (REGO) backed tariffs.

15. Governance, reporting and review

Governance: Senior responsibility for delivery of this Strategy lies with the <u>Senior Vice-President and Provost</u> and the <u>Senior Vice-President and Registrar & Secretary</u>, who Co-Chair our Climate and Environmental Crisis (CEC) Board.

Delivery of this Strategy will be overseen by the Advocate Climate Taskforce (ACT) and Climate and Environmental Crisis (CEC) Board, a sub-committee of the University Executive Board. For more details of our governance structure, see our governance overview.

Figure 15: Sustainability governance structure



Reporting: We report our greenhouse gas emissions in line with the Greenhouse Gas Protocol, using the operational control approach. We report both location-based and market-based emissions and use market-based for measuring progress against our carbon target. We have adopted the <u>Standardised Carbon Emissions Framework (SCEF)</u>, a voluntary framework seeking to standardise reporting across the higher education sector.

Progress will be reported publicly annually via the University's <u>Annual Report and Financial</u>
<u>Statements</u>, and the <u>Annual Sustainability Report</u>. Elements of our carbon footprint are subject to external assurance.

Key performance indicators

- Scope 1 and 2 carbon emissions market-based (tonnes tCO₂e)
- Scope 1 and 2 carbon emissions location-based (tonnes tCO₂e)
- Scope 3 carbon emissions, excluding out-of-term international student commuting (tonnes tCO₂e)
- Carbon emissions from out-of-term international student commuting (tonnes tCO₂e)
- Percentage of scope 2 electricity from renewable sources (%)

Review: We will review this Strategy before 2030, including setting our next near-term target on our journey to net zero.

Appendix 1 – Carbon baseline detail

Table 1: Full breakdown of carbon emissions and their categories – note that both marketand location-based scope 2 are listed.

	Category Summary	Carbon tonnes 23/24 (tCO ₂ e)
Scope 1	Fuels Total	6,353
	Natural Gas	6,036
	Oil	318
Scope 1	Bioenergy	
Scope 1	Refrigerant & Other Total	119
Scope 1	Passenger Vehicles Total	152
Scope 2	Heat and Steam Total	8
Scope 2	Electricity - Location Based Total	6,505
Scope 2	Electricity - Market based Total	455
Scope 3	Purchased Goods and Services Total	58,090
Scope 3	Purchased Goods and services - Water Total	149
Scope 3	Capital Goods Total	
Scope 3	Fuel- And Energy-Related Activities not included in Scope 1 and 2 Total	1,649
	T&D and WTT Leased Upstream	193
	T&D and WTT Leased Downstream	414
	T&D and WTT On-site accommodation	64
	T&D and WTT of Scope 1&2	879
	WTT of the passenger Vehicles	27
	WTT of Oil	72
Scope 3	Upstream Transportation and Distribution Total	-
Scope 3	Waste Generated in Operations Total	37
Scope 3	Business Travel Total	9,542
	Business Travel	8,555
	Business Travel WTT	987
Scope 3	Employee Commuting Total	3,816
Scope 3	Upstream Leased Assets Total	7
Scope 3	Downstream Transportation and Distribution Total	61,448
	Student Term Time commuting	2,516
	Student out of term time Commuting (international)	41,675
	Student out of term time Commuting (UK)	13,488
	On site student accommodation	3,770
Scope 3	Processing of Sold Products	-
Scope 3	Use of Sold Products	-
Scope 3	End-of-Life Treatment of Sold Products	-
Scope 3	Downstream Leased Assets total	2,635
Scope 3	Franchises	-
Scope 3	Investments total	4,749

Table 2: Near term and long-term baseline figures (location based)

	23/24 baseline	23/24 baseline
	for long term	for near term
	tCO₂e	tCO₂e
Scope 1	6,624	6,624
Scope 2	6,751	6,751
Scope 3	142,123	100,448
Total	155,498	113,823

Table 3: Near time and long-term baseline figures (market based)

	23/24 baseline	23/24 baseline
	for long term	for near term
	tCO₂e	tCO₂e
Scope 1	6,624	6,624
Scope 2	463	463
Scope 3	142,123	100,448
Total	149,209	107,535

Figure 1: 2023/24 Greenhouse gas emissions profile (location-based), by category

