

The Climate Challenge 2024

in partnership with Carbon13, Cambridge Enterprise, the Maxwell Centre, the Cambridge Institute for Sustainability Leadership Canopy and Energy IRC, sponsored by Moda Living

We invite small teams of postgraduate students and postdoctoral researchers to submit early-stage proposals for scalable ideas that facilitate decarbonising transitions, considering the theme of nature.

Who is the Challenge is for?

- We're looking for small (2–3 people) inter-disciplinary teams of **postgraduate students and postdoctoral researchers**. You don't need to be a seasoned entrepreneur. You also don't need to be part of the University, as long as teams are at least 50% University members (see eligibility section below for more details).
- You don't need to be a scientist or engineer to participate! We're also interested in ideas related to economic, societal and behavioural change that could lead to reductions in energy consumption and greenhouse gas emissions.

What does the Challenge involve?

- We're interested in ideas that are in their **initial conceptual stages**, rather than fully formed projects or products¹.
- The Challenge is a **learning and skills development opportunity** in entrepreneurship, with the potential to translate into a business opportunity.

What problems do we want you to solve?

This year's theme: Nature

We have chosen the theme of '**nature**' for this year's Climate Challenge to encourage participants to consider the importance of the natural world. We want participants to consider how our environment has been and will continue to be affected by the climate crisis and how nature-based and nature-inspired solutions can both mitigate the effects of climate change and help us adapt to future change.

It is not essential that proposed solutions in the Climate Challenge relate directly to the theme of nature. The theme is there to provide a source of inspiration, where needed, and to encourage lateral thinking.

The natural environment provides services vital to the survival of humanity, from food to medicine to the air we breathe. Not only that, but nature plays an essential role in mitigating and adapting to the effects of climate change. Oceans, forests, peat bogs and wetlands can serve as carbon sinks, helping to remove greenhouse gas emissions, whilst mangrove trees in coastal areas can shelter us from climate induced extreme weather, such as storm surges. Anthropogenic overuse of resources, from fossil fuels to fish, have contributed to mutually reinforcing environmental degradation, biodiversity loss and climate change. The resulting nature and climate crises are inextricably linked, and we cannot address one without the other.

¹ If you have an idea that is further along in its development, you might want to explore some of the other [entrepreneurship projects](#) offered at the University.

Nature-based solutions offer an opportunity to harness the power of nature to address climate change, whilst potentially protecting and restoring biodiversity and landscapes and yielding additional social benefits.

The brief for the Climate Challenge is deliberately broad, as solutions could involve anything from on the ground innovations that could drive systemic behavioural change in individuals and communities, to technological and digital solutions. Critically, we're looking for solutions that are intrinsically **scalable**, i.e., they have significant potential to grow in size, capacity or scope.

Examples of previous Climate Challenge (previously named Carbon Challenge) projects:

Note that the climate/carbon challenges have taken different forms over time in terms of prize money, theme etc.

- [Climate Challenge 2023](#); [Climate Challenge 2022](#); [Carbon Challenge 2018](#); [Carbon Challenge 2017](#)

Competition partners and sponsors



[Cambridge Zero](#) exists to maximise the University of Cambridge's contribution towards achieving a resilient and sustainable zero-carbon world. Cambridge Zero is not just about developing greener technologies or a zero-carbon university. We are harnessing the full range and breadth of the Collegiate University's capabilities, both in the UK and globally, to develop solutions that work for our lives, our society and our economy.



Over the next five years [Carbon13](#) will bring diverse and amazing people together to create scalable ventures with the combined potential to reduce CO₂e emissions by 400 million tonnes (or 1% of global emissions). Carbon 13 provide the opportunity to build teams, bypass barriers and access expertise and finance to create impactful start-ups that address the climate emergency.



[Cambridge Enterprise](#) supports academics, researchers, staff and students in achieving knowledge transfer and research impact. They help with using commercial avenues to develop ideas and expertise by offering expert advice and support in commercialisation and social enterprise.



[Energy IRC](#) is a University-wide Interdisciplinary Research Centre which supports the activities of over 250 Cambridge academics working in energy research. Energy IRC supports academics with interdisciplinary funding opportunities and industry engagement to increase the impact of the University's research into the global energy transition away from fossil fuels.



[The Canopy](#) is a community of impact-led start-ups, entrepreneurs and small businesses accelerating solutions to global sustainability challenges. Part of the University of Cambridge Institute for Sustainability Leadership (CISL), the Canopy provides workspace, business support, and access to knowledge and networks across the innovation, academic and corporate ecosystems



[The Maxwell Centre](#) is the centrepiece for industrial engagement with the physical scientists and engineers working on the West Cambridge Science and Technology Campus. Two-way flow of ideas and researchers adds value when 'blue-skies' activities meet research objectives relevant to economic opportunities for industry and society at large. The scale of industrial involvement is already substantial, and this will be increased through the activities in the new building, in the collaborating Departments and in the commercial space on the West Cambridge site. The associated industrial research, development and manufacturing will generate an overall economic impact within the UK much greater than the co-investment committed to the programme.

MODA

[Moda Living](#) is the UK's leading developer and operator of rental communities. Founded in 2014, the business has built a UK-wide pipeline of more than 20,000 homes with a combined GDV in excess of £6.5bn. Moda is committed to responsible development and operation that protects the futures of its local and wider communities. In line with its business-wide ESG strategy, Next Generation Futures, the Moda team is working with leading partners to hit ambitious sustainability targets, including becoming a net zero operational business by 2030.

Eligibility

Teams should be of 2-3 people. At least 50% of the team (i.e. at least one person in a team of two, and at least two people in a team of three) must be postgraduate students or postdoctoral researchers at the University of Cambridge. See Terms and Conditions for full eligibility details.

Prizes

First prize: £1500

First and second runner-up prizes: £750

Prizes will be shared evenly between all team members. For exceptionally tractable proposals, there may be opportunities to engage further with Carbon13 and their Venture Builder or for ideas to be implemented in the University itself as a pilot study. See Terms and Conditions for more details on prizes.

How will the competition work?

- The proposals will be assessed at two stages
1. **The Concept Note.** All teams must submit a concept note detailing their idea, including the potential for impact and mitigation, scalability, budgeting, risks, etc. A full summary of what to include in the concept note is given in Annex 1.
 2. **The Pitch Presentation (for shortlisted proposals only).** Shortlisted teams must give a presentation of their idea at the final competition event, which will be judged by an expert panel.
- Throughout the competition we will support you with events and training. See Key dates below for more details.

Key dates in 2024

Friday 19 January, 6:30-8:30pm Lecture Theatre A, Student Services Centre	The Launch – Join us to kick off the Climate Challenge 2024.
Wednesday 24 January, 4:30-6pm	Ideas Jam with Dr Amy Munro-Faure from Cambridge Zero
Wednesday 24 January, 6pm onwards	Pub social
Wednesday 31 January, 4:30-6pm	Intro to Climate Entrepreneurship and Evaluating Impact with Zoë Loughlin from CISL Canopy and Dr Nicky Dee from Carbon13
Wednesday 7 February, 5-6pm	Intro to the Voluntary Carbon Market with Cambridge Centre for Carbon Credits (4C)
Wednesday 14 February, 4:30-6pm	Effective Storytelling with Viola Jardon from CISL Canopy
Thursday 15 February, 11:59pm	Concept Note deadline
Wednesday 21 February, 5-6pm	Intellectual Property Rights Masterclass with Chris Gibbs from Cambridge Enterprise
Monday 26 February	Shortlisting results announced
Wednesday 28 February, 4:30-6pm	Pitching with Climate Start-Ups – meet some climate entrepreneurs and hear them pitch their ideas!
Wednesday 6 March, 5-6pm (online)	How to get backing from a climate VC – plus, meet and ask questions of a climate VC!
Thursday 14 March, 2-7pm	The Final with final pitches, judging and awards

How will the winners be decided?

- **Long-list (based on concept note only)** – judged by members of the organising partner teams.
- **Shortlisting (based on concept note and presentation)** – Judged by experts from across innovation, industry and nature.

Criteria for longlisting and shortlisting are given in Annex 3.

Benefits of being involved

- Meet, network and socialise with other people interested in climate innovation.
- Develop skills and drive your ideas to the next level through high-quality, free training.
- Gain exposure to people and organisations working at the cutting edge of climate innovation.

Annex 1 - Structure of concept note

Deadline: Thursday 15th February 2024 at 23:59 GMT proposals to be emailed or transferred via wetransfer to Elizabeth.Simpson@admin.cam.ac.uk

Structure: Teams are free to present their proposal as they please but must incorporate the following pieces of information. **Maximum 1500 words.**

Project name

Project team

Initiative Summary (please indicate if we can use this publicly, if not please complete a separate summary that we can share publicly)

Tell us more about what inspired you to enter this competition with this initiative?
What challenge is your initiative trying to address?
What is your proposed solution to the above challenge?

Team

Tell us about your team and how you have the right mix of qualities to address the challenge?
Beyond your team, who else are you working with to support this initiative?

Evaluate Impact²

What is the impact of your initiative?
Think about the key metrics related to your initiative and ways you can quantify your impact. Consider the size of your problem and the size of your market – what is the total addressable market? What is the size of your serviceable market?
You may want to provide a statement on your additionality, including your estimate of leakage and permanence.
You may want to apply life cycle thinking or draw on examples of existing Life Cycle Assessments for related innovations.
You may want to consider other positive impacts or outcomes of your initiative, potentially linking to frameworks like the Sustainable Development Goals.
How will your initiative impact stakeholders?

Business model / commercial case

Who do you think would pay for your solution and why?
What do you see as the next milestones for your initiative to progress over the next 2 years?

Innovation and competitor awareness

Who else is addressing this challenge and what makes your approach different?
What do you think are the next steps to develop your solution?

² We will provide further guidance on how you can evaluate the impact of your initiative in the session with Nicky and Zoë on 31 January. Ahead of this session, you might want to think about an example of how your initiative impacts stakeholders, where a stakeholder might be a customer (consumer or business).

What do you think are the main risks to developing your initiative (technically, commercially, regulatory)?

Entrepreneurship and dissemination (not assessed!)

Do you want to continue as a net zero entrepreneur?

- With the existing team and idea
- With the existing idea but a different team
- With the existing team but a different idea
- With a different team and idea
- I do not want to be an entrepreneur

Annex 2: Competition terms and conditions

These terms and conditions apply to the Climate Challenge 2024 (“the Competition”). By submitting an entry to the Competition, entrants confirm that they have read and understood these terms and conditions and agree to be bound by them. Persons submitting entries to the Competition on behalf of teams must have written authority from all team members to do so.

Organiser of the Competition

1. The organiser of the Competition is The Chancellor, Masters, and Scholars of the University of Cambridge (“the University”).

Eligibility

2. Entry is via team submission only. No individual entries will be accepted or considered. Teams must consist of a minimum of 2 members and a maximum of 3. At least 50% of the team (i.e. at least one person in a team of two, and at least two people in a team of three) must be a postgraduate student or postdoctoral researcher at the University of Cambridge. The other team member must only fulfil criteria set out in clause 3.
3. Entrants must be UK residents (England, Scotland, Wales and Northern Ireland) and aged 18 years or over. Staff members within Cambridge Zero, Carbon13, Cambridge Enterprise Ltd, The Cambridge Institute for Sustainability Leadership, the Maxwell Centre and Energy IRC, and staff funded by Cambridge Zero and their immediate families are not permitted to take part in the Competition. Moda Living employees and their family members are also not permitted to take part in the Competition.
4. Any questions regarding eligibility shall be determined by the University, whose determination shall be final. If unsure of eligibility, entrants should contact Elizabeth.Simpson@admin.cam.ac.uk before submitting an entry.
5. The University reserves the right to require reasonable evidence of eligibility before making payments of prizes.

General

6. The deadline for submission of entries is 23:59 GMT on Thursday 15 February 2024.
7. Support can be sought from external bodies, but a majority of the work must be completed by the team members. Please see the section on Intellectual Property in competition entries, below.
8. Teams must generate proposals for a specific technology, policy, intervention or campaign aimed at having a positive climate or carbon impact in accordance with the Competition brief.
9. To be considered in the Competition, the proposals must not have been implemented already, either on the University estate, or externally.
10. Any carbon savings must be estimated through thorough theoretical calculations and/or physical trial and metering. All calculations should use the current year’s [carbon conversion factors published by the UK Government](#).
11. The University reserves the right to hold void, suspend, cancel, or amend the Competition at its discretion.

Prize award and Funding

12. Proposals will be judged on the basis of the published judging criteria. The judges' decision is final and the University will not enter into correspondence regarding the outcome of the Competition. Feedback will be provided at the University's discretion. The University reserves the right to award prizes dependent on the quality of Competition submissions and may not award one or more prizes where entries do not meet requisite standards.
13. Prizes will be shared equally amongst the registered members of winning teams.
14. Payments to staff may be subject to deduction of applicable tax.
15. Payments may be made by the University or a third party nominee of the University, including but not limited to Cambridge Enterprise Limited or Carbon13 Limited.
16. The University does not commit to taking forward any proposals but if it does go on to provide funding it further reserves the right to elect not to proceed further with and to cease funding a successful project at any time at its sole discretion.
17. Aside from the prizes, Teams will not be compensated for their time or costs incurred in developing proposals for the Competition.

Intellectual Property and Confidentiality

18. Entrants are reminded that failure to take steps to preserve the confidentiality of their entries may result in loss of available intellectual property rights to protect the subject matter, including patentable inventions or registerable designs.
19. Those receiving and judging Competition entries will be required to sign confidentiality undertakings in materially the form annexed to these terms and conditions. However, none of the University, Carbon13 Limited or Cambridge Enterprise Limited is responsible for enforcement of any confidentiality obligations on entrants' behalf nor do the University, Carbon13 Limited or Cambridge Enterprise Limited accept any liability for any breach of the confidentiality undertakings by individuals.
20. Entrants warrant and represent that the submission of their Competition entries to the Competition, the grant of the licences at clause 22 below (and the exercise by the University or its Competition Partners of the rights granted), and their participation in the Competition, do not and will not infringe any third party intellectual property rights or constitute an unlawful act or breach of entrants' obligations to any third parties in any applicable country or jurisdiction.
21. Entrants must declare any third party interests or involvement in their entry to the University on submission of their proposal.
22. Entrants grant the University and its competition partner's use of the public summary in the application form for the purpose of promotion, operation and/or administration of the competition and any future equivalent or related competition or activity. For information contained within the public summary the entrant is granting the University and its Competition partners (including but not limited to Carbon13 Limited and Cambridge Enterprise Limited) a non-exclusive, worldwide, royalty-free, irrevocable licence (with right to grant sub-licences), for the full period of any intellectual property rights, to (i) copy, adapt, distribute and publish via any media the entry public summaries for all purposes in connection with the promotion, operation and/or administration of the Competition and any future equivalent or related competition or

activity. Entrants further grant the University and its Competition partners a limited licence to copy, adapt and distribute the substantive content of their entry solely in connection with the internal operation and administration of the Competition, including but not limited to for the purpose of judging and/or coaching/mentoring.

Data protection

23. The University will collect and process entrants' personal information (names, contact details, any personal information supplied in competition entries, and, for successful entrants, financial information such as bank details) for the purpose of administering the Competition and contacting entrants as necessary. We also collect diversity data for statistical monitoring purposes; the provision of this data is optional. It will not be shared with any third parties except in aggregated, anonymised form. For these purposes the University is a data controller in respect of entrants' personal data. The University will share entrants' personal information with a limited number of third parties solely in connection with the administration of the Competition, for example for the purpose of judging, including but not limited to Carbon13 Limited. A link to Carbon13 Limited's applicable privacy notice is here: <https://carbonthirteen.com/legal/>. In addition, the University may wish to issue and manage publicity arising from the Competition and the University will liaise with entrants about this as applicable. The University will retain entrants' personal information for 3 years after the end of the competition. For more information about how the University handles and shares entrants' personal information, and entrants' rights under data protection legislation, please see <https://www.information-compliance.admin.cam.ac.uk/data-protection/general-data>

Governing law and jurisdiction

24. These terms and conditions shall be governed by English law, and the parties submit to the exclusive jurisdiction of the courts of England and Wales.

If you have any questions, please email Elizabeth.Simpson@admin.cam.ac.uk

Annex 3: Judging criteria

Evaluation criteria

The evaluation criteria are drawn from the concept note headings in annex 1. The same criteria will be used to assess the concept note and the pitch. See below:

CRITERIA	
Initiative Summary	
Team	
Evaluating Impact	
Business model / commercial case	
Innovation and competitor awareness	
TOTAL:	

All criteria above will be scored between 1 to 6, where 1 is low and 6 is high. The maximum score is 30.

- 6 - Significant potential, is compelling, relevant, specific and very convincing
- 5 – Shows potential, is relevant, specific and convincing
- 4 - Shows potential and relevance, but not entirely convincing or specific
- 3 - Some potential but has missing information and unsupported statements
- 2 – Limited potential, inaccuracies in parts and in need of more specificity
- 1 - Unconvincing, contradictory information, and missing critical information

Annex 4: Confidentiality undertaking

To be signed by those receiving entries in connection with the Climate Challenge 2024 (“the Competition”)

As a judge or other authorised recipient of entries to the Competition, I acknowledge that entries may include information, technology and ideas that entrants participating in the Competition regard as confidential.

Accordingly, in consideration of the provision of the Competition entries to me, I agree for the benefit of all entrants that I will make all reasonable efforts to hold in strict confidence any information, technology and ideas in Competition entries, and will not copy, reveal or disclose such information, technology and ideas to any third party save as provided for in the Competition terms and conditions. Additionally, I will not use any such information, technology and ideas for my own benefit or the benefit of any organisation with which I am affiliated now or in the future. I will not use information for any purpose without first obtaining the written agreement of all applicable entrants.

This Agreement shall not apply to any information, technology and ideas which at the date of this Agreement (i) are in the public domain or subsequently come into the public domain through no fault of mine (including but not limited to Competition entry public summaries), (ii) were already known to me on the date of disclosure, provided that such prior knowledge can be substantiated, (iii) properly and lawfully become available to me from sources independent of the supplying party, or (iv) are disclosed by me to the extent required by law or pursuant to the requirement or request of a governmental agency provided that in such event I shall inform the Competition organiser of the nature and extent of any disclosure so required if I am lawfully able to in advance if reasonably practicable or, if not reasonably practicable, as soon as possible after disclosure.

This undertaking shall come into effect on the date below and the obligations above shall continue for a period of three (3) years.

This undertaking shall be subject to the law of England of Wales.

Name:

Signature:

Date: