



香港中文大學
The Chinese University of Hong Kong



University
of Exeter



Joint Centre for Environmental Sustainability and Resilience

Grand Challenge Scheme 2024
Guidelines for Applicants



Background

Environmental Resilience and Sustainability (ENSURE) is a joint research centre established by The Chinese University of Hong Kong (CUHK) and the University of Exeter in 2018. The aim of the centre is to embark on large-scale, interdisciplinary collaboration to tackle societal challenges, notably concerning the interaction between humankind and the environment. Its focus is placed on the threats of climate change, air and water pollution, and biodiversity loss, as well as on human health and wellbeing.

By promoting highly integrated approaches to understanding the impacts of complex interactions between physical and socioeconomic processes, ENSURE will result in world-leading, high-impact research addressing emerging environmental threats including climate change, air and water pollution and biodiversity loss.

Grand Challenges Scheme

Following the Grand Challenges Initiator Grant Scheme (Phase 1) introduced in summer 2024, ENSURE is now inviting applications to the Main Grant Scheme (Phase 2). This new phase commits substantive funding for up to three large projects which can demonstrate potential for research impact and securing external funding and collaboration.

The deadline for application to the Main Grant Scheme is Sunday 9th February 2025.

Objectives

The Grand Challenges Scheme intends to support collaborative projects that can achieve long-term research goals and real-world impacts. They shall be directly engaged with policy, industry, and civil society stakeholders in order to effect meaningful change, and will be developed sustainably beyond the funded project period. The projects must moreover clearly relate to one or more of the Grand Challenges, as listed:

GC1. To conserve and promote biodiversity in sustainable ways, and to optimise societal benefits from genomic to ecosystem scale

GC2. To enhance monitoring and forecast capability of climate extremes in the developing world to help adaptation of regional economies

GC3. To promote, manage and finance ecosystem-based solutions to climate change, and to enhance co-benefits with multiple Sustainable Development Goals

GC4. To build and finance efficient and sustainable energy systems

GC5. To ensure food and water security for vulnerable communities from local to regional scales

GC6. To facilitate and encourage behavioural changes to address food-water-energy nexus and climate change challenges

PIs who have received an ENSURE Initiator Grant or have been funded through any previous ENSURE funding scheme are encouraged to apply to the scheme in order to build on their previous work. Nevertheless, the scheme is open to applicants with or without a previous ENSURE grant.

Funding details

1) In the first instance, ENSURE will allocate up to £100,000 per year for projects lasting a maximum of two years from 1st August 2025 to 1 August 2027 (i.e. £200,000 per project). The University of Exeter and CUHK will contribute equally to the funding and support each of its researchers.

2) University funding will be allocated to the project on the basis of expenditure claimed by academic staff at each partner university, such that eligible and approved costs incurred by University of Exeter staff will be met by the University of Exeter, and eligible and approved costs incurred by CUHK staff will be met by CUHK. The lead applicant will be responsible for submitting project reports at key stages of the scheme.

3) Matching Funding from External Source(s):

a) Applicants shall provide evidence (see 3b below) in their applications for how they will ensure match funding from a third-party source(s) of up to £50,000 (both monetary and in-kind) per year will be secured for the project. This may include soliciting and securing additional funding from research councils, government, private industry, donors, or other appropriate sources with strategic alignment with the goals of ENSURE.

b) Evidence provided may include letters of support which state the amount, duration, and type of funding (e.g. monetary or in-kind). If in-kind funding is provided, the external source shall indicate how it amounts to the required level (i.e. up to £50,000). Applicants should ensure that any third-party partner understands that its support for the project does not suggest that it may claim intellectual property rights (IPR) from the work or outcomes arising out of the project, and that the IPR rests with the sponsoring universities and, where applicable, individual creators in the project, including PhD students and post-docs who may be assigned to work on the project.

c) Through seeking external match funding to support the project, the applicants are prompted to engage relevant and key stakeholders in policymaking, social, and/or industrial sectors so as to ensure research impact.

d) It is expected that any third-party partner would work directly with the project PIs in the delivery and administration of the support it provides. The University of Exeter and CUHK will, in parallel, work directly with the project PIs in the delivery and administration of the funding committed by the ENSURE.

4) Eligible costs must directly relate to the project, be justified in line with project deliverables, and, where any costs are to be met by Exeter or CUHK, will need to be approved by the relevant Head of School/Faculty at both institutions as may be required. These can include:

- Travel and subsistence
- Organization of events and meetings
- Consumables
- Postdoctoral salaries
- Small pieces of equipment (up to £20,000)
- Cost of non-academic (research or technical) staff (referred to as 'directly incurred staff costs in the UK). Where funding is requested for research and technical posts that are also partially funded by another grant/source of funding, applicants shall check the terms and conditions of any pre-existing contract to ensure no conflicts of interest.

5) Costs that are not eligible include:

- Academic salaries (with the exception of Postdoctoral/ Research Assistant salaries, as detailed in Section 4 above)
- Third-party travel costs (unless met by the third-party funder)
- Publication costs
- Overheads including estates and indirect costs
- Studentship/tuition fees
- Costs associated with internal research facilities

Please note that there will be separate funding for a Split-site PhD Student Programme (i.e. joint PhD student supervision) to support the work of ENSURE commencing in January 2026; these students may work directly with the PIs and Co-Is of the Main Grant project. The University of Exeter will seek to enrol one PhD student to be homed at Exeter from commencing January 2026 supervised by the Exeter-led Main Grant PI (whose project will begin from August 2025). The Split-site PhD student will then be expected to be placed at CUHK for research for six to twelve months in Year 2 of their degree, co-supervised by the Main Grant Co-I, then return to Exeter and complete the rest of the programme. CUHK will equally seek to enrol one PhD student to be homed at CUHK from January 2026, supervised by the CUHK Main Grant PI. This student will then be expected to be placed at Exeter for research for six to twelve months during their second year of studies, co-supervised by this Main Grant Co-I, then return to CUHK.

Eligibility Criteria

Grand Challenge grants are available to the academic community at CUHK and the University of Exeter. At CUHK, the applicants must be a full-time academic staff at Assistant Professor rank or Research Assistant Professor rank or above.

Project teams must be collaborative (i.e. include colleagues from CUHK and the University of Exeter), and have an established working relationship and be able to demonstrate a successful track record. Projects funded by the ENSURE Initiator Grant or any previous ENSURE funding scheme would be good examples of established working relationships.

Application process

1) Applicants are recommended to discuss their plan to submit a proposal with the Co-Directors of ENSURE, as well as their Head of Academic Department or Dean (i.e. at Exeter, Associate pro Vice Chancellor [Global] in your Faculty) as appropriate) in advance of submission to ensure that the research objectives and deliverables are in line with the respective university's strategic directions.

2) Applicants must complete the Grand Challenge Main Grant Application Form in conjunction with their counterpart(s) at the partner institution. One lead applicant must be nominated for each application. Funds for successful applications will be managed by the PI at the lead institution and Co-I at the partner institution, though each of the PI and Co-I will receive funding from their respective institution for the project.

3) Applicants should ensure that activities are planned and scheduled, so that - if successful - projects can be undertaken within the necessary timeline.

4) Applications must be fully costed and approved in accordance with each institution's internal processes in advance of submission.

5) Application should be submitted to both institutions, using the email addresses below:

·University of Exeter:
GP-Funding@exeter.ac.uk

·CUHK: iees@cuhk.edu.hk

6) All applications will be assessed by a panel formed by the ENSURE Co-Directors and approved by the joint centre's International Steering Committee, at which point final decisions will be made. Lead applicants will be notified within the specified timeline (see key dates on the next page).

7) The deadline for applications is Sunday 9th February 2025.

Assessment Criteria

Applications will be assessed via a competitive selection process using the following criteria:

- Evidence of existing collaboration, which will be strengthened/ expanded by this project.
- Clear evidence that the team (across both institutions) is carrying out world-leading research in the relevant area.
- Evidence of complementary strengths at both institutions.
- Clear plans for how the team and its work will continue to develop beyond the project.
- Proposes a workstream for at least one PhD candidate (one of whom who may be supported, if successful, through the Exeter-CUHK Split-site PhD Programme. Please note that the Main Grant project is scheduled to begin in August 2025).
- Present evidence that it will contribute to meeting the following objectives:
 - Receipt of significant external funding.
 - Generating societal benefits and impact.
 - Advancing and sustaining ENSURE's research agenda and capacity.
 - Expanding collaboration in an areas of strategic importance.

The project should have the following qualities:

- Constitutes work with potential to be world leading.
- Be strategically aligned to one of the Grand Challenge themes.

- Be aligned with the United Nations Sustainable Development Goals.
 - Clearly explain the added value of carrying out through ENSURE.
 - Represent good value for money and demonstrate feasibility and appropriateness of the resources requested to deliver the objectives.
 - Confirm and provide details of the match funding.
 - Present plans for industry engagement and generating IP and publication of research. Clearly illustrate how these plans have the potential to influence national/international policy or lead to other significant implications.
 - Present a clear timeline of the activities to be undertaken and details of these activities .
- Please refer to Appendix B for further information regarding the assessment criteria.

Key dates

9 February 2025 - Application deadline

February/ March 2025 - ENSURE
ISC select Main Grant projects or award

3 March 2024 - Applicants notified of outcome

August 2025 - Project starts

February 2026 - Start-up Phase Report due and six-month expenditure report due

31 July 2026 - Mid-term Progress Report due and 12-month expenditure report due

July 2027- Project Completion Deadline and second 12-month expenditure report due

December 2027 - Final Project Report

29 February 2028 - Final expenditure report due -
Post-project Impact Report due

Grant acquittal and reporting

Awardees must agree to comply with all terms and conditions related to the receipt of funding, including deadlines and procedures for the acquittal of funds, and reporting on outcomes. Grant acquittal and reporting.

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Awardees will have a maximum of 24 months after the award date to utilise the funds. Funds that are not utilised within the specific period will have to be returned.

The project lead is responsible for submitting four reports outlining the progress, successes, and outcomes of the project:

1. Start-up Phase Report: Reporting the first six (of 24) months of project activities. Progress beyond this phase will depend on whether agreed pre-defined objectives have been met, as assessed by ENSURE.

2. Mid-Term Report: Summarising the activities and outcomes of the project in the subsequent 12 months (of 24 months).

3. Final Project Report: Summarising the progress made in the project in its final six (of 24) months, as measured against key initial objectives.

4. Post-project Impact Report: 18-months from the project completion date, the PI will be expected to submit a longitudinal report outlining follow-on activities emerging from the ENSURE Main Grant, new funding obtained, new publications emerging and evidence of impact from your project

These reports will be used by ENSURE for the follow-up of potential opportunities and reporting on outcomes. Please note that information provided in these reports may be highlighted on the ENSURE website, as well as the websites of CUHK and the University of Exeter.

The Grand Challenge Scheme represents a flagship initiative of ENSURE. As such, grant recipients should be prepared to engage with events and publicity for the Centre.



In the event that a funded project includes international travel, grant recipients must abide by the official reporting, insurance, procurement, and registration requirements as outlined in their home institution's policies. Please consult Exeter and CUHK processes and policies as appropriate as concerns international travel and procurement.

Feedback and resubmissions

Resubmission will be by invitation online.

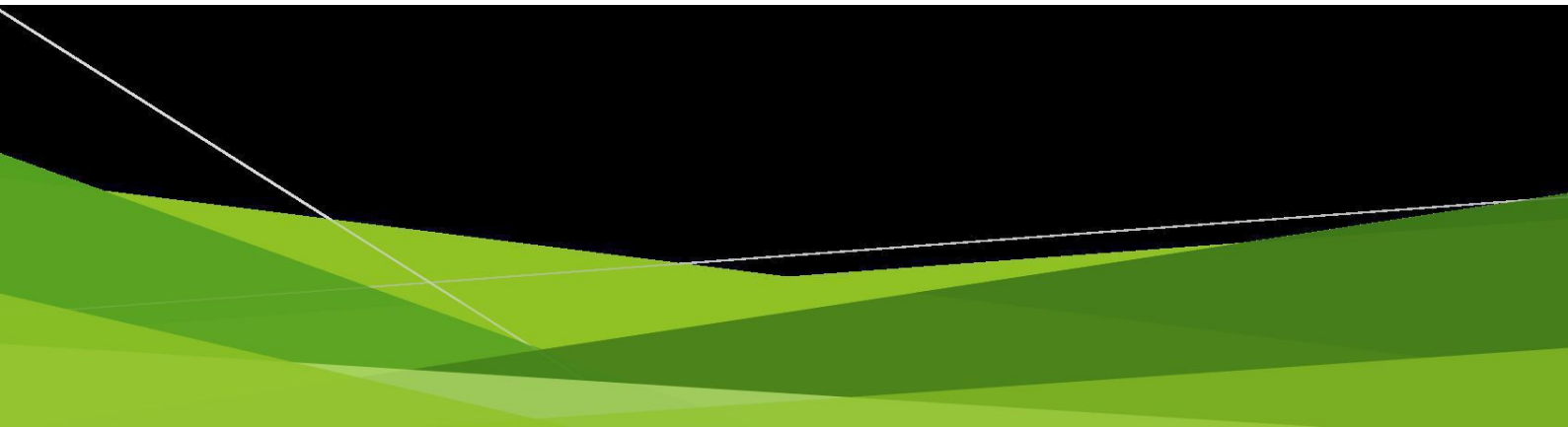
Contacts

University of Exeter Global Partnerships' Team:
GP-Funding@exeter.ac.uk

University of Exeter Director of Global, Peter Clack:
p.clack@exeter.ac.uk

CUHK Institute of Environment, Energy and Sustainability: iees@cuhk.edu.hk

Please contact the representative at your home institution if you would like any additional information.



Appendix A: Pitfalls and top tips

1.Added value: Failing to articulate, and therefore persuade the panel, of the added value of your partnership.

Ask your team – *what can be achieved part of an ENSURE collaboration that could not be achieved as a single institution?* Your answer needs to be strongly and clearly articulated in the application and evidenced where appropriate.

2.Step change: Failing to envisage and articulate the potential step change that can be achieved through your project.

This connects to point one. Consider how your partnership can lead to step-change, as made possible by the unique resources available through ENSURE, *i.e., what will you do differently: academics, infrastructure, training, external partners, etc.?*

3.Leveraging external funding and other tangible outcomes: Panel members need to be persuaded of the application's value for money. They are looking for clear anticipated outcomes and realistic, cost-effective plans and leadership to achieve them.

4.Articulate specific details of any potential external funding sources that can be leveraged (amounts, submission deadlines). Provide the same level of detail for other anticipated outcomes, e.g., publications, industry links, staff development, etc. Provide details about managing the project itself, how you will achieve the project goals in the time and with the funding available.

5.Sustainability: Applications fail to articulate how the momentum and successes achieved will be sustained in the longer term.

Outline a clear sustainability plan. Consider and articulate issues such as ongoing partnership meetings/communications, future links with industry or other external partners, leveraging further funding, expanding the network, raising the profile and influence of the group both internally and externally.



Appendix B: Detailed assessment criteria for the Grand Challenge Scheme

This guidance has been provided to assist applicants when completing their Grand Challenges Scheme application form. The purpose of this guidance is to explain the type of information and evidence which is required to satisfy the assessment criteria.

Assessment criteria	Evidence required
Quality of initiative/ activity	<p>The application has been carefully considered and planned. It shows strong potential for advancing a development or collaboration. The project goals are challenging, yet achievable.</p> <p>The bid identifies the need for and value of the proposed research and links this to ENSURE research objectives. It includes supporting details on how the project would be significantly enhanced thanks to it being undertaken through ENSURE, rather than by an individual academic or institution.</p>
Potential to expand upon an existing or newly identified collaboration	<p>The strength and potential of the relationship has been clearly articulated. The bid further shows how the group, and its work can develop beyond the project. The mechanisms that will be used to ensure ongoing communications and interaction have further been outlined. A clear potential trajectory for the project and the relationship has been outlined.</p>
Strategic fit	<p>The bid clearly demonstrates how it relates to one of the Grand Challenge themes.</p>
Alignment with the United Nations Sustainable Development Goals	<p>The project aligns with one or more of the UN's Sustainable Development Goals. The relevant goal/s have been stated, and explanation has been provided as to how the project will aim to advance the goal/s.</p>
Leveraging funding	<p>Clear details have been provided for how the project aims to leverage external funding as a direct result of this award.</p>
Anticipated outcomes and benefits	<p>Anticipated outcomes and benefits have been clearly detailed, with expected timeframes provided.</p>

<p>Value for money</p>	<p>The project provides strong evidence of:</p> <ul style="list-style-type: none"> - Being a unique research opportunity that is in line with ENSURE's purpose - Mobilising a new or already interested, but perhaps disparate, research group, or disciplines, to come together and collaborate for the purpose of step change quality research - Project management capabilities of the proposers - reassurance that, if funded, the project will run on time, to budget and deliver against agreed aims, activities and outcomes - Tangible and quantifiable outcomes and impact for the benefit of the institutions as well as the more immediate group - The potential to publish high quality papers, influence policy, and leverage external funding as part of ENSURE - Sustained development of ENSURE and collaborative research in the longer term.
<p>Impact</p>	<p>The bid demonstrates how this project will create impact in a way that will benefit both the University of Exeter and Chinese University of Hong Kong.</p> <p>Examples of impact could include leverage of external funding/measures of academic esteem such as publications/ raised profile of the research and ENSURE both internally and externally with industry, local communities, and government.</p>

