

2022 Sustainable Earth Institute Small Collaborative Research Awards Call for Applications: Guidance notes

Summary – Key Information

This call is for funding small inter-disciplinary research projects. The aim is to provide seed funding for inter-disciplinary projects, to unlock and increase further larger scale funding bids.

- **Deadline for applications: 17:00, 23rd January 2022** (after this time no applications can be accepted).
- **Timescale:**
 - Project must be completed by end of June 2022
 - Larger funding bid must be submitted by June 2023
- **Budget:** up to £3k per collaboration/project
- **Application:** Please email sei@plymouth.ac.uk with completed application.

Background

Established in September 2015, the Sustainable Earth Institute is about building resilience for our planet through an integrated approach to challenge-led research, education and innovative knowledge exchange. The Institute consists of over 300 researchers investigating sustainability from a variety of different disciplines and perspectives including natural and social sciences, engineering, arts, humanities, health and business. The SEI brings researchers together with businesses, community groups and individuals to work collaboratively on projects that deliver positive impact towards a Sustainable Earth.

[Further information on the Sustainable Earth Institute can be found on the website](#)

This year the SEI is introducing annual interdisciplinary Challenge themes that transcend disciplinary research group structures. These themes provide a focus for SEI activities, including Small Collaborative Funding. The themes identified by the Executive and Operations Teams for 21/22 include:

- Healthy Landscapes
- Net Zero Carbon
- Environmental Intelligence and Sensors
- South West Natural Powerhouse

21/22 Interdisciplinary Challenge Themes

Further information on these Interdisciplinary Challenge Themes can be found below:

Healthy Landscapes

Global pressures of climate change and population growth are putting unprecedented pressure on the planet's natural capital that supports food, water and energy security, the foundations of societal health and wellbeing. While conversion of natural vegetation to agriculture accelerated over the past century, rates of change have slowed in recent decades largely due to the uncomfortable reality that we are running out of land suitable for conversion. This emphasises the need to deliver more food from the same amount of land without triggering environmental and climatic catastrophe. To achieve this, agricultural systems need to go through radical

change in land management approach as well as production and supply chain systems, especially to reduce current losses to waste.

Regenerative agriculture concepts offer a solution to this challenge wherein land management practice is steered to not only conserve critical natural resources (e.g. soil and water) but also enhance landscape health and restore prior degradation. In the context of Shreefel et al.'s (2020) proposal that soil is the basis of regenerative agriculture, i.e. 'an approach to farming that uses soil conservation as the entry point to regenerate and contribute to multiple ecosystem service', it is clear that whole-system approaches to landscape management are required with decision making grounded in rigorous evidence of net environmental gain from farm to landscape scale. Technological developments, such as artificial intelligence, the analysis of big data, drone development, machine learning, and robotics could play a key role in this.

While there are multiple entry points into research in this field from One Health concepts (environmental health, animal health, human health), to systems thinking across soil-crop-water or people-land-water connectivity, it is clear that collaboration across disciplines is essential to deliver the credible evidence base required to support land management decision making and future policy. In this context, we are seeking ideas for pilot projects that transcend disciplinary boundaries and integrate with emerging research agendas linked to the UK Government 25 Year Environment Plan and Defra Environmental Land Management Scheme.

Net Zero Carbon

Over the past couple of years various national/local governments, businesses, social enterprises and Universities have declared a Climate Emergency, often with subsequent targets to reach Net-Zero Carbon. For example, in 2019, Plymouth City Council (PCC) declared a climate emergency, announcing that they will be working with their partners to make Plymouth carbon neutral by 2030. Net Zero Carbon has also featured in various National and local plans – e.g. Build Back Better - plan for growth, launched in March 2021, Local Enterprise Partnerships, "Blueprint for Clean Growth" launched in May 2021 and the Devon Carbon Plan which is shortly to be published.

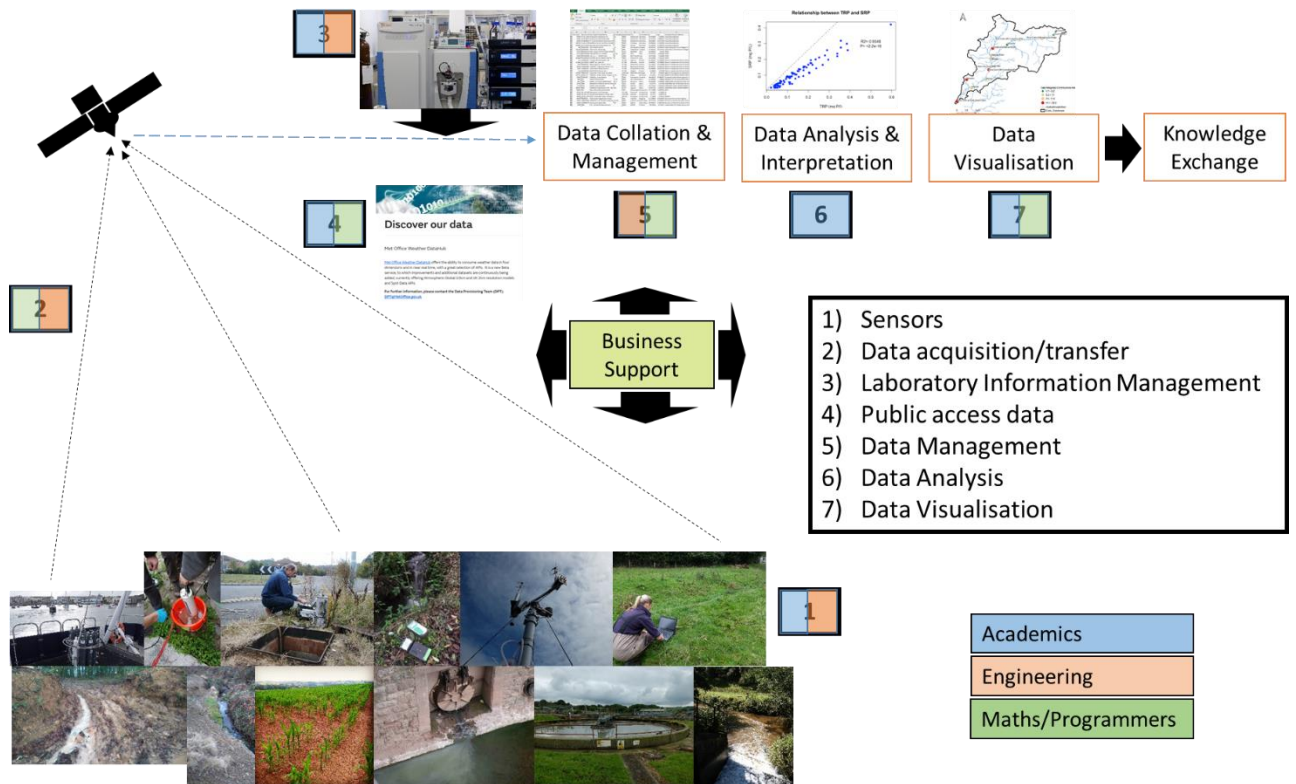
However, now is the time for **action** and reaching Net-Zero Carbon requires a holistic, systems-thinking approach requiring input across a number of deeply interconnecting areas including Built Environment, Mobility, Energy, Food, Resources, Behaviour Change, Nature-based solutions, Arts and Policy. University of Plymouth have expertise in all these areas – as showcased at the recent Sustainable Earth 2021 forum - <https://www.plymouth.ac.uk/research/institutes/sustainable-earth/se21> . We also have a number of relevant knowledge exchange and research projects that are currently live.

However, we can do more to accelerate progress in this important area!

Hence, we are calling all researchers who are working in this area (or interested in finding out more about how they can!) to begin to come together around this topic and submit a bid to the small collaborative awards.

Environmental Intelligence and Sensors

Regulators and stakeholders are demanding more real-time data. We are increasingly becoming data rich and information poor. Within the SEI's EI&S theme the University of Plymouth has a national and international track record in specific areas of data acquisition, interpretation and visualisation of environmental data. Until now however, there has been no concerted effort to draw these strengths together to deliver the next generation of environmental monitoring and assessment, particularly as we increasingly move towards real-time data and response. We are seeking to build on research bases within [environmental monitoring and fate](#), [sensors](#), [agri-tech](#), and [biology](#) which has led to the formation of a University-wide Sensors group, which is already forging new collaboration and gaining funding. The graphic below identifies a clear process for drawing together and developing our theme within the SEI.



South West Natural Powerhouse

The South West Natural Powerhouse is a movement that aims to connect natural capital assets – our resources – with the South-West’s ambition for Clean Growth. The SWNP is an independent consortium formed from industry, academia and local government who work in collaboration to facilitate clean growth in the South West. The consortium fosters responsible stewardship of our natural resources, whilst promoting sustainable and accelerated development of the blue and green economies. We share a fresh, cohesive vision which puts the value of its remarkable natural resources at its heart. Clean growth will be achieved through creating supportive conditions that promote sustainable development and the circular economy through catalysing and embracing new themes for example https://tevi.co.uk/wp-content/uploads/2021/05/Tevi_Georesources-for-Sustainability.pdf. The consortium is currently re-defining its role and impact to potentially include information sharing, creating ideas, proposal writing and collaboration, providing advice, and influencing funding opportunities – for example the group provides a ready-made vehicle to partner and access more significant and strategic funding calls aligning with South-West ambitions around Blue/Green, FOW, critical minerals and space. The group aims to be ready to respond to the Shared Prosperity and the Levelling Up policy initiatives as well as County Deals.

2022 Sustainable Earth Institute Small Collaborative Research Awards Call for Applications: Application details

Purpose of the Call:

- The overarching purpose of this call is to provide seed funding for Inter-disciplinary projects that lead to future larger scale funding bids.

Essential Deliverables/Outputs:

- A minimum of one substantial external funding bid (submitted by June 2023).
- A final academic report (which could be a draft journal article – see below) – by June 2022
- Evidence of contributions to SEI communications.

Desirable Deliverables/Outputs:

- One peer reviewed journal article – the draft of which can be submitted as the final report;
- Evidence of dissemination at national / international research conferences;
- Photograph/Video of research (arranged through liaising with SEI Core Team).

The Assessment Panel has identified the following requirements for the call:

- In order to be eligible for the call, the project must be interdisciplinary (cross-faculty is desirable) and must be completed by June 2022.
- Any member of University of Plymouth staff with interests in sustainability research may apply for funding.
- Colleagues identifying as Early Career Researchers and new arrivals to University of Plymouth (within the current academic year 2021/22) will be prioritised.
- Please note that there is additional ring fenced funding from the Faculty of Arts, Humanities and Business provided specifically for cross-faculty collaboration with the Faculty of Arts, Humanities and Business staff
- Please note that it is only necessary to get a signature from the Head of School (or equivalent) or Associate Dean, Research. Since this is an internal funding award it is not necessary to go through the full external process (Award Manager etc).
- There is the limit of one application as PI per member of staff.
- We ask that there is a “light touch” estimation of the project costs for the budget within the application.
 - The R&I funding advisors have agreed to support applicants with a quick costing. This will be a light touch costing that won't go through Award manager, Peer Review, Approvals etc.
 - Please contact the Funding Advisors for help with staff costs using the Funding Advisory Service email address: fundingadvisoryservice@plymouth.ac.uk
- Successful applications will need to go through the usual process with R&I funding advisers.
- In order to be eligible for the call, the project must be completed (and the funding defrayed) by end of June 2022.

Assessment Criteria

- A panel will assess the applications against the following criteria:
 - Essential Criteria:
 - Is the project inter-disciplinary?
 - Is the project concept clearly aligned to this year's Challenge Themes?
 - Assessed Criteria:
 - Is the concept novel with a clear rationale?
 - Will the project create a clear path to future funding?
 - Does the project have clear aims and objectives?
 - Does the proposal have realistic deliverables and timescales?
 - Does the work programme represent value for money (e.g. leverage external funds, in-kind contributions...)?
 - Does the project team have relevant experience?
 - Does the research project concept have a relevant dissemination and impact plan?

Timescales – Key Dates

- Funding call workshop:– 15th November 2020
- Funding call launched - 15th November 2020
- 2022 SEI Small Collab Awards - Deadline for applications – 23rd January 2022
- Assessment Panel meeting – Early February 2022
- Applicants informed about Awards – mid-February 2022
- Delivery of individual projects – February – June 2022
- Delivery of report by June 2022
- Submission of larger follow-on funding bid by June 2023