



UK Research
and Innovation



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for Environment
Food & Rural Affairs



Department for
Energy Security
& Net Zero

Building A Green Future – Targeting national priorities

Transforming Land Use for Net Zero, Nature and People (LUNZ)

Collaborative Research Programme Between UKRI,
Defra and DESNZ, DAERA, Scot Gov. Welsh Gov.



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Welcome!

Transforming Land Use for Net Zero, Nature and People (LUNZ)

- UKRI Webinar
- 19th April 2023, 11:30-13:30



- The webinar will start at approximately 11:35
- Technical difficulties: events@ukri.org
- Make connections with those on the webinar by introducing yourself, your organisation and your area of interest via the chat function
- Submit questions through the Zoom Q&A function
- Individual specific questions: better to email us at tlunznp@bbsrc.ukri.org
- Webinar is being recorded
- Answers to submitted questions will be published on the funding opportunity page
- Full details of the call can be found on the [funding finder](#).

Introduction and context

Prof. Sir Duncan Wingham: Executive Chair of the Natural Environment Research Council

Prof. Gideon Henderson: Defra Chief Scientific Adviser



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Programme Scope and Vision

Harriet Trewin: BBSRC

Head of Bioscience for Sustainable Agriculture
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Strategic research meets national need

Programme aim:

To mobilise and support research to work in partnership with government and industry to tackle net zero through action in the UK land sectors.

- **To support Government and industry to deliver UK legal commitments** on net zero and the environment, increasing food security and economic growth.
- **To transform the way UKRI and Government work together** to tackle our most pressing environmental challenges
- **To deliver strategic high impact transdisciplinary research**, expert knowledge and community that is co-designed and co-led with policymakers.
- **To build on past investments and deliver impact** (e.g. building on the Defra Sustainable Intensification Platform, NERC and BBSRC soils programmes, Land use decisions SPF, Transforming the food system SPF, Greenhouse Gas removal SPF etc.)



Transforming Land Use for Net Zero, Nature and People (LUNZ) programme

Programme Outcomes

Putting the UK at the forefront of a sustainable transition to net zero by:

- **Strengthen UK transdisciplinary capability & capacity** that results in community mobilisation, advancing knowledge, partnerships, and skills in net zero for land use practitioners and policy makers. Generating research, tools and evidence that informs policy to explore different UK land-use scenarios and appraise the economic, energy security, biodiversity and carbon impacts of these
- **Embedding research into policy** Integration of new and existing evidence on land use for climate mitigation, biodiversity, agriculture, and other land uses, to enable policymakers/ decision makers to design climate resilient land-policy for 2030 and beyond.
- **Developing clean growth opportunities** (practices and technologies) that have real world transformational impact.



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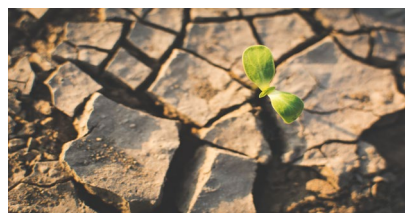
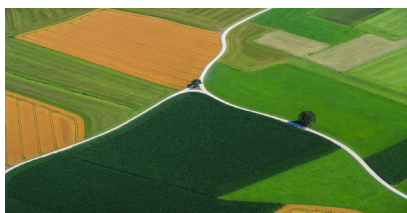
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Transforming Land Use for Net Zero, Nature and People (LUNZ) programme

The programme will fund transdisciplinary research that feeds directly into policy and decision-making in three interlinked themes – soil health, agricultural systems and land use change.

Consortia will be expected to form relationships with Government, industry and other stakeholders to develop and explore plausible and innovative pathways to net zero across these three themes that:-

- Are adapted to the impacts of climate change;
- Provide societal and environmental benefits; and
- Meet policy commitments of the UK government and Devolved Administrations such as those set out in the 2023 Environment Improvement Plan.



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Research Scope

Both the Hub and research projects will support policymakers to address key challenges in the three interlinked thematic areas:

1. Soil system health and carbon dynamics
2. Reduce agricultural emissions*
3. Land use change

Focus on Net Zero but, seeking to understand the co-benefits, trade-offs and risks on the wider environmental, social and economic outcomes (biodiversity, air and water quality, biodiversity, food production, rural economy etc.).

Please note that this opportunity **focuses strictly on UK land use** and does not include land use and net zero research and interventions in overseas countries that are part of the UK supply chain or that are under its influence.

*In the context of this programme the term 'agriculture' refers to all activities pertaining to crops and farmed animals, including horticulture, aquaculture, as well as mixed systems such as agroforestry and silvopastoral systems.



Transforming Land Use for Net Zero, Nature and People (LUNZ) programme

The programme consists of two components:

(1) **The coordination and translation Hub (£6.25M)** (40 months) - convene a transdisciplinary, cross-sectoral community building relationships with Government and industry to co-develop pathways, advance research, integrate knowledge, identify routes to impact and fast-track evidence into policy to support the UK in the transformation towards net zero, whilst meeting other environmental and societal goals such as those listed in the 2023 Environmental Improvement Plan

(2) **Research Projects (£14M)** (36 months)- transdisciplinary research consortia that can deliver cutting edge research to find solutions and provide evidence to inform policy options for driving the desired systems transformation.

UKRI will fund 80% of the fEC

You must be based at a UK research organisation eligible for UKRI funding.

What we are looking for

Dr Dan McGonigle: Defra

Head of Systems, Innovation and Futures

Central Science Division



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Transdisciplinary working: Understanding land use and farming system change



Transforming the way UKRI and Government work together

- Mobilising the UK's land and environmental researchers to work with Government to tackle some of our most intractable environmental policy challenges
- Providing a mechanism for:
 - Government to work directly with academics in developing solutions
 - Mobilising researchers to find practical and viable solutions – thinking about policy delivery and economic viability
 - Academics to directly feed into policymaking and delivery – e.g. through secondments and placements into Govt
 - Research to react and respond to rapidly evolving policy needs
 - Feeding evidence into specific policy timelines – CB7 targets to be published in 2026
- Government is directly investing **funding** in the programme and **time** to work with the successful consortia

How is this programme different to previous UKRI-Government partnerships?

- Scale of Government contribution - equal partnership between Defra and UKRI
- Ability to work rapidly and responsively
- Engagement of Government in programme
 - Call design
 - Selection process
 - Project officers to work with consortia
 - Programme management and reporting
 - Executive board
- Programme management – monitoring and reporting of progress



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Research Themes

The programme will take an integrated, systems approach to soils, land-use and farming, targeting policy questions through cutting edge research, codesigned between researchers, policymakers and stakeholders.



Land use

- **Drivers** of land use change
- **Social, environmental, and economic outcomes** from land use change
- **Scenarios** for future UK land use
- **Policy interventions:** to drive the right change in the right places
- **Decision support:** improving capability and boosting adoption



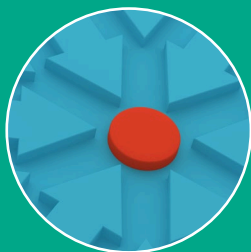
Farming systems

- **Solutions:** new production technologies and management strategies and their adoption
- **Transformation** of the UK agri-food system (new business models and social innovations from national to local scale)
- **Monitoring & scaling:** demonstration, metrics and monitoring at farm, regional and national levels



Soil system health and carbon dynamics

- **Rethinking soil health:** new indicators
- **Soil monitoring:** tools and technologies
- **Rethinking soil management:** new approaches

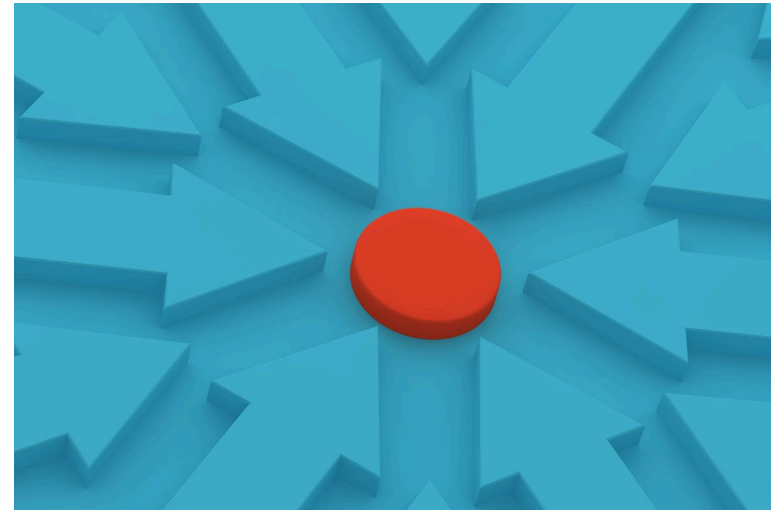


Coordination and Translation Hub

- Policy codesign
- Rapid and responsive research and advice
- Building and embedding capability
- Transdisciplinary community building
- Programme cohesion

**For more detail of research questions, see announcement of opportunity*

LUNZ Coordination and Translation Hub

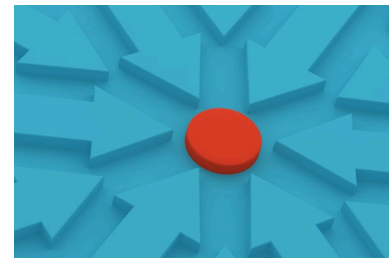


Convene a transdisciplinary, cross-sectoral community to support the UK in achieving net zero, while meeting other environmental and societal goals. The hub will advance research, integrate knowledge, identify routes to impact and fast track evidence into policy.

- Funding is available for up to 40 months, with a fixed start date of 01 November 2023.
- We will invest a total of £6,250,000 to support **one Co-ordination and Translation Hub** (at 80% full economic cost).

Ways of working

The Hub will work with Government departments, Devolved Administrations, industry and other stakeholders to:



LUNZ Coordination and Translation Hub

Co-develop policy

- **Codesign Policy pathways** – working directly with policy makers
- **Embed policy into research and vice-versa:** E.g. secondment of academics into government to support urgent policy needs.
- **Develop land use scenarios**, focusing on
 - Desired goals and trajectories of change
 - Forward projections based on emerging trends

Undertake rapid responsive work

- **Provide flexible and rapid response** to urgent and emerging questions,
- **Running agile projects**, e.g. rapid evidence synthesis, that provide quick responses to policy and decision-making needs.

Build capability in government and with other stakeholders

- **Knowledge brokering and decision support**
 - Access to models
 - People with knowledge brokering skills
 - Embedding at national, regional and local levels

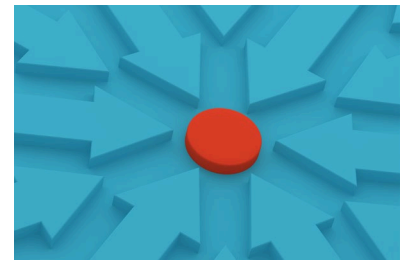
Build a transdisciplinary community

- **Convene key stakeholders** to develop a national dialogue and identify routes to impact
- **Develop knowledge brokering approaches** to facilitate exchange across stakeholder communities
- **Identify evidence gaps**

Ensure cohesion

- **Across** the programme
- With **external** programmes

Deliverables and outcomes



LUNZ Coordination and Translation Hub

New transdisciplinary research, tools and evidence synthesis that informs policy

New ways of working between Government and academia

Research embedded into policy and practice

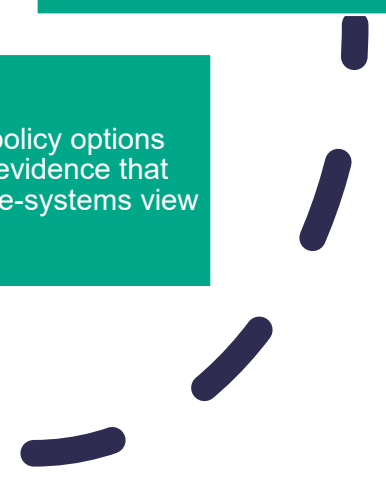
Increased capacity and capability to mobilise knowledge

Programme is agile and flexible, addressing emerging policy needs, Ensure cohesion and integrate knowledge across the programme

Demonstration of the cost and benefits of specific land use options to net zero, with an analysis of the trade-offs, resilience

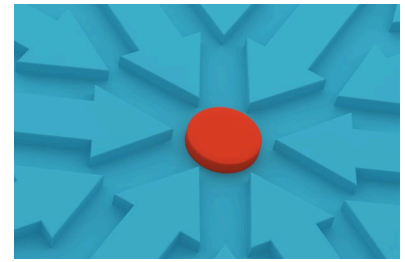
Development and adoption of modelling tools, mitigation strategies, solution frameworks, assessments of uncertainties, rapid reviews, etc.

Realistic policy options based on evidence that takes a whole-systems view



LUNZ Coordination and Translation Hub

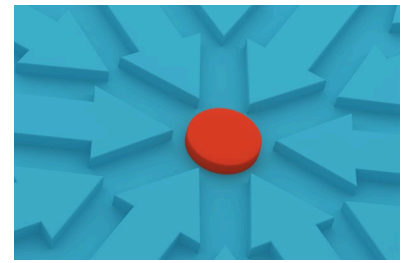
Key requirements



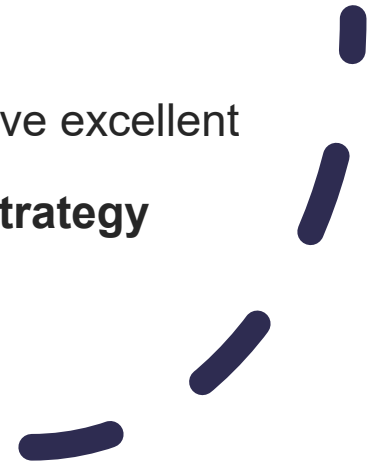
- **be UK-wide** to include England, Northern Ireland, Scotland and Wales
- embed principles and best practices to ensure **equality, diversity and inclusivity**
- take a **holistic approach** that builds on, and links to other key UKRI and wider UK investments in net zero as stated above (see scope).
- involve a **broad range of disciplines in transdisciplinary research** agendas and engage non-academic stakeholders, including policy makers at national and local levels across the UK
- include regular monitoring, learning and evaluating on progress and **reporting to the programme funders**
- the programme funders will provide continued oversight and governance, through this reporting, to ensure that **policy relevance** is maintained throughout, as an essential deliverable of the hub outcomes.

LUNZ Coordination and Translation Hub

The Hub Team



- A diverse team that includes researchers and innovators from a **broad range of disciplines**, as well as **policymakers, practitioners and wider civil society**.
- The team must be **interdisciplinary**, and must include academics, policymakers, and external practitioners with skills in knowledge brokering, facilitation, modelling, systems thinking, and futures.
- Disciplines involved could be drawn from the agricultural, biological, natural, environmental, physical, engineering, mathematical, economics and social sciences.
- The Hub team will be required to have excellent skills and experience in:
 - **Policy, communication and strategy**
 - **Analysis and evidence**
 - **Co-ordination**



How to apply

Luke Williams: BBSRC

Senior Portfolio Manager, Sustainable Agriculture and Food



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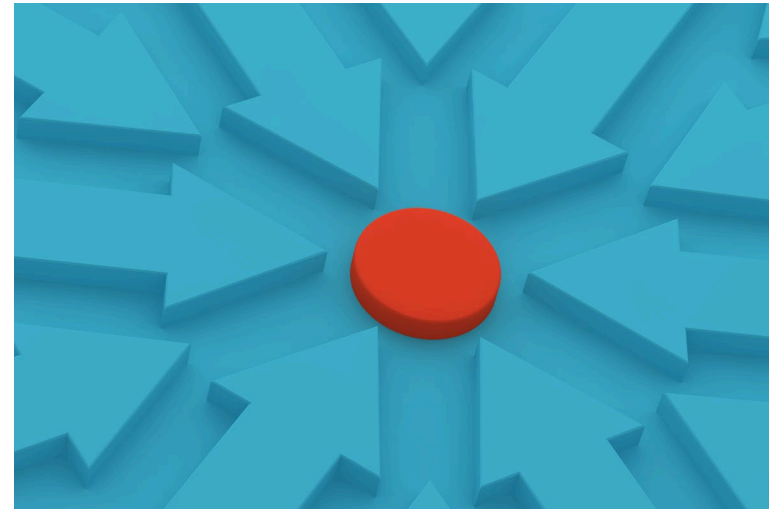
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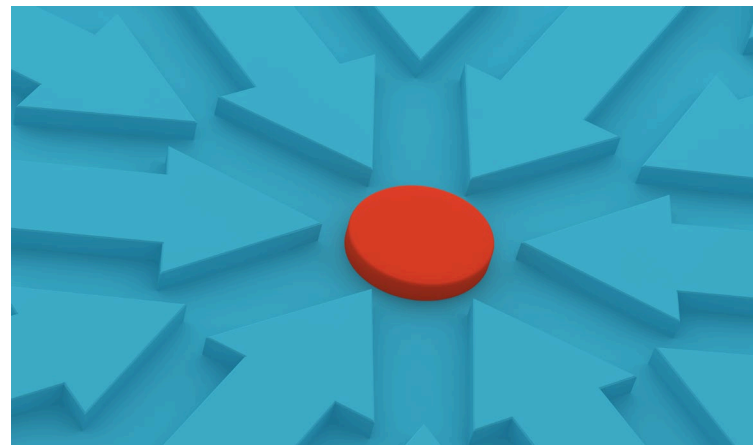
- Funding is available for up to 40 months, with a fixed start date of 01 November 2023.
- We will invest a total of £6,250,000 to support **one Co-ordination and Translation Hub** (at 80% full economic cost).
- Expression of Interest: download the form from the opportunity and return to: tlunznp@bbsrc.ukri.org
- Eols will not be assessed, but will be checked for eligibility and applicants contacted shortly after.
- Full proposals to be submitted through Je-S, with details to be provided to those submitting Eols.



Community workshop	03 May 2023
Expression of Interest closing date	24 May 2023
Invitation to submit	Early June 2023
Full submission closing date	25 July 2023
Panel Meeting (interviews)	September 2023
Funding Announcement	October 2023
Project Start	01 November 2023

LUNZ Coordination and Translation Hub

- This workshop will provide prospective applicants with a chance to meet the funders, learn more about how the envisaged hub will work with policy makers and other key stakeholders and to begin networking with other applicants to form application consortia.
- Attendance at the workshop is not a prerequisite for submitting an expression of interest.
- We will make a report from the workshop publicly available on the funding finder along with the contact details of those who attended after the event to help facilitate networking.



Community Workshop 11:00-16:00, 3rd May 2023, London

The Eventbrite page for sign-up can be found [here](#).

A draft agenda is shown below.

Session
Opening Address
Overview of Transforming Land use for Net Zero, Nature and People (<i>UKRI</i>)
Evidence into Policy
Introduction to Breakout Session Process
Breakout Session One: Land Use and Net Zero: Advancing Research
Lunch
Breakout Session Two. Evidence into Policy
Summary and Close

Transforming Land Use for Net Zero, Nature and People (LUNZ)- Research projects



LUNZ – research projects Scope



The research projects must be transdisciplinary, **integrating all relevant disciplines**, and closely involving policy makers and other stakeholders in co-design and co-delivery through a **systems approach**.

Proposals should seek to **address key policy questions** in these thematic areas through **cutting edge research** focusing on a combination of new knowledge, technical innovations, and socio-economic change

Research proposals should aim to:

- address research questions across **at least two of the three themes** and seek to explore the linkages between/among them;
- support the transformation that is needed within the system and to enable the development of tools and strategies to address the challenges outlined; and
- demonstrate solutions and facilitate decisions on policy options for achieving net zero targets whilst meeting other societal benefits and environmental commitments.

Please note that this opportunity **focuses strictly on UK land use** and does not include land use and net zero research and interventions in overseas countries that are part of the UK supply chain or that are under its influence.



LUNZ – research projects



What we are looking for

- Scientific merit
- Fit to the opportunity
- Transformative potential, policy relevance and impact
- Capacity and Capability of the Research Team
- Equality, Diversity and Inclusion



LUNZ – research projects



- Funding is available for up to 36 months, starting on 01 March 2024
- The full economic cost (fEC) of your project can range from £2,500,000 to £4,500,000. UKRI will fund 80% of the fEC.
- Expression of interest: apply through UKRI Funding Service <https://funding-service.ukri.org/OPP082/apply/83>
- Eols will not be assessed but will be checked for eligibility and applicants contacted shortly after.
- Full proposals to be submitted through UKRI Funding Service, with details to be provided to those submitting Eols.
- **There is no option to submit via Je-S for this opportunity**

Opportunity Live	ASAP
Community workshop	12 June 2023
Expression of Interest closing date	11 July 2023
Full submission closing date	18 Oct 2023
Panel Meeting	January 2023
Project Start	01 March 2024

LUNZ Research projects

- This workshop will provide prospective applicants with a chance to meet the funders, learn more about how the research projects will work with the community hub and with key stakeholders and to begin networking with other applicants.
- Attendance at the workshop is not a prerequisite for submitting an expression of interest.
- We will make a report from the workshop publicly available on the funding finder along with the contact details of those who attended after the event to help facilitate networking.



Community workshop – in-person, 11:00-16:00, 12th June (Manchester, venue to be announced shortly)

A link to the Eventbrite page for sign-up will be shared on the [funding finder](#) in coming days

A draft agenda is shown below

Session
Opening Address
Overview of Transforming Land use for Net Zero, Nature and People (UKRI)
Plausible Pathways to Net Zero
Introduction to Breakout Session Process
Breakout Session One: Land Use and Net Zero: Research Challenges
Lunch
Breakout Session Two. Evidence into Policy
Summary and Close

Transforming Land Use for Net Zero, Nature and People (LUNZ)

Contact details:
tlunznp@bbsrc.ukri.org

<https://www.ukri.org/opportunity/land-use-for-net-zero-hub-lunz-hub/>





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Questions?

Panel Q&A Session
BBSRC – Harriet Trewin & Luke Williams
DESNZ – Rose Durcan
Defra - Dan McGonigle
ESRC – Susie Stevenson
NERC - Simon Kerley
Scottish Government – Sallie Bailey
Welsh Government - Ann Humble
DAERA – Gerardine McEvoy



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Thank you

