

£14 Million in Funding Announced for Five Research Projects into Land Use and Net Zero

United Kingdom Research and Innovation (UKRI) have today announced the next phase of the Land Use for Net Zero Nature and People (LUNZ) Programme, which aims to mobilise and support research that works in partnership with government and industry to tackle net zero through action in the UK land sectors.

Funding has been granted for five separate consortia of stakeholder and research organisations, that will carry out cutting-edge research into the interlinking themes of soil health, agricultural systems and land use change.

This is the second phase of the LUNZ Program, following the launch of the LUNZ Hub (in November 2023) which is tasked with convening a transdisciplinary, cross-sectoral community 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, while meeting other environmental and societal goals.

Reacting to the announcement, LUNZ Hub co-lead Professor Lee-Ann Sutherland (James Hutton Institute) said:

“These are groundbreaking and ambitious projects that address many of the critical research gaps and challenges behind how we transition UK land use for both climate goals and society as a whole.

“In their design these projects reflect many of the characteristics of the Hub: transdisciplinary, addressing social, economic and scientific challenges simultaneously, and with a strong emphasis on designing and imagining scenarios that explain the transition to Net Zero.

“Over the course of the program the LUNZ Hub will work closely with the LUNZ Projects to identify synergies and opportunities for collaboration, as well as potential drivers of change and viable policy levers.”

LUNZ Hub co-lead Professor Heiko Balzter (University of Leicester) said:

“We’re looking forward to working with the new research projects through the LUNZ Hub, and to building a transdisciplinary community that can work across businesses, policymaking and the third sector to accelerate the net zero transition.

“The breadth of organisations involved in these projects, and the combined expertise of the principal investigators is inspiring. It will be exciting to help disseminate solutions that benefit net zero, nature recovery, and people, and that can be delivered at scale through local and national policy action”

Projects detail

The projects cover the following five topics:

1. **LUNZ Grassland (Grassland Resilience for Net Zero)** aims to optimise grassland use through techniques like upland grazing, low-carbon forages, and agroforestry could help the UK achieve its mitigation goals while saving over £1.6 billion annually. LUNZ Grasslands will offer innovation assessments, co-create adoption pathways, and provide policy solutions through Life Cycle Assessments scenario modelling, and extensive stakeholder engagement.
2. **LUNZ OpenLAND.** Will create a validated, UK-wide, spatially explicit integrated modelling framework, to evaluate potential net zero pathways, extending the capability of OpenCLIM (developed under previous UKRI funding). This will be achieved by ground truthing soil carbon and soil health using empirical data, and by developing and trialling robotic monitoring for measuring and verifying soil carbon and health.
3. **LUNZ Footprint (2050 Greenhouse Gas Accounting Living Lab)** Will develop and evaluate a scalable auditable farm- and food-level GHG accounting framework for UK land use to sustainably reduce GHG emissions. This will include building capacity and net zero literacy, testing sequestration

predictions, assessing validation methods and exploring the governance and equitability implications of scaling.

4. **LUNZ RESPECT (Rapid Engagement with Stressed Peatland Environments and Communities in Transformation)** will produce data, methods, landholder tools and proposals for governance reforms to change agricultural practices on peatland to contribute to the UK's net zero target. Two case study regions - the Forth and Humber Catchments in Scotland and England - will be investigated in-depth, where tensions exist between food production, historic environment preservation, carbon sequestration and ecological restoration.
5. **LUNZ JUSTLANZ (Just transformation of food-farming systems: reconciling net zero and other land-use ambitions)** explores how to achieve Net Zero justly, whilst achieving and balancing priorities such as food production, biodiversity restoration and people's needs in agricultural landscapes. The project combines policy-driven land use scenario models, climate data and future visions from food-farming communities to co-create "preferred" scenarios that attempt to reconcile land-use demands.

You can find out more about each of the projects on the LUNZ Hub website: <https://lunzhub.com/projects/>

Editor's Notes

- The total funding of £14million has been allocated to five separate research projects distributed within the range of £2.5 - £4.5 million each.
- Funding is available for up to 36 months, with the first projects starting in August 2024
- This funding opportunity is co-funded by UKRI, Defra (on behalf of England and Wales), DESNZ, and has been co-designed with Department of Agriculture, Environment and Rural Affairs (DAERA), Welsh Government and Scottish Government.
- The Land Use for Net Zero (LUNZ) Hub is a consortium of 34 organisations that aims to provide the UK government and devolved administrations with the rapid evidence they need to develop policies that will drive the land use transformation required to achieve Net Zero and other environmental and social targets by 2050.

For further inquiries, please contact theo@sustainablesoils.org. For more general information on the LUNZ Hub please visit lunzhub.com or email info@lunzhub.com.



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