

Consultation on Environment, Natural Resources and Agriculture Research Strategy 2027-32

Response from the Society for the Environment (October 2025)

Introduction

The Society for the Environment (SocEnv) defines the standards for professional competence in environmental practice, ensuring key decisions are made by verified professionals. Having received a Royal Charter in 2004, we license professional institutions to award the Chartered Environmentalist (CEnv), Registered Environmental Practitioner (REnvP) and Registered Environmental Technician (REnvTech) professional registrations. There are now over 8,500 registered environmental professionals, sharing a common vision of delivering a sustainable future shaped by environmental professionalism.

This response has been shaped by the SocEnv [Soils and Stones project](#), an influential initiative bringing together experts from across sectors to share their knowledge, experience and solutions on safeguarding soils and soil related material, for use and reuse. This response is formed from the project's collective expertise and activity, and we'd be happy to discuss in further detail.

In our response, we emphasise priorities central to SocEnv's vision, including a commitment to evidence-based policy, underpinned by consultation with experts and good quality data; and taking a holistic approach to solving our interconnected social, economic and environmental challenges – with recognition for the vital role of soils and international policy alignment and co-operation being paramount.

Response

Overall Strategy

Q1. The research strategy outlines a new outcome focused approach with five core Missions and a set of corresponding Challenges. Do you think this is the right approach to take?

We welcome the overall structure of the ENRA research strategy, recognising the strength of its outcome-focused Missions, Challenges, and Areas of Research Interest (ARIs). The adoption of a 'theory of change' is a valuable addition, providing clarity and testable objectives. However, there are concerns that the framework could become fragmented, overly bureaucratic, or insufficiently agile. Missions should be defined in SMART terms to enable clearer evaluation, while greater flexibility is needed to accommodate emerging issues and fundamental science. The strategy also underplays the transformative role of technologies such as AI, which should be explicitly integrated to ensure Scotland remains competitive.

Q2. Do you think the research strategy will enable us to get the best research and scientific evidence from the best providers?

The programme has the potential to deliver world-class research and evidence from Scotland's leading research providers, with the Main Research Providers offering proven excellence and international reach. Yet, the inward-looking emphasis on Scottish providers may limit wider collaboration. Stronger alignment with UK and international partners, a robust Innovation Strategy, and clear recognition of academic impact would strengthen the research base.

Q3. Do you support the proposals on delivering our investment, including the five key funding mechanisms and governance approach?

On investment and governance, we support the overall framework but caution that the funding mechanisms risk duplication, inflexibility, and over-complexity. Overall, we endorse the general direction of the investment and governance strategy. Success will depend on transparent, proportionate allocation across all proposed funding mechanisms, with clear ringfenced support for agile and innovative research, and a genuine desire for asset stewardship such as infrastructure both physical (buildings and estates) and virtual (data). Consideration should be given to a Mission Board structure, explicitly responsible for alignment, challenge management, risk, and oversight of each Mission to avoid duplication and enhance delivery transparency.

Q4. Do you have any other comments or suggestions on any part of the Strategy?

No comment

Impact Approach

Q5. Do you think the proposed Impact Framework is an appropriate way of defining, monitoring and evaluating the impact of research funded through this programme?

The proposed adoption of a Theory of Change approach is welcome. However, Figure 5 demonstrates the inherent complexity of delivery the programme of work and without SMART metrics could prove problematic to both effectively monitor and evaluate impact. Moreover, it is noted a desire to move to a process that mimics the Research Excellence Framework (REF) evaluation of UK Higher Education Institutes that involves significant stakeholder engagement and input through the production of testimonials. We would caution against inadvertently generating significant stakeholder fatigue, irrespective of how impactful research outcomes are.

Areas of Research Interest

Q6. The government evidence needs are being captured as Areas of Research Interests within the Strategy. Do you think this is the right approach to take?

Assuming that the proposed Areas of Research Interest map to government policy, this is a sensible approach. Given the number of Areas of Research Interest, there is a potential perception of a scattergun approach with limited focus and a lack of clear research ambition.

Q7. Do you agree that the key ARI questions are captured within the strategy?

We fully support a strong focus on soils, in particular, the clearly identified challenges and Areas of Research Interest associated with soils. However, we note a lack of focus on urban soils including brownfield sites and an absence of soils explicitly associated with both the crop and biodiversity challenges. With the latter, we assume that there is an unstated inherent assumption that soils would be central to delivering to the crop and biodiversity challenges, rather than an unfortunate oversight. Similarly, the unexpected lack of an explicit mention of water, intrinsically linked with soil, is perplexing. With an increasing focus on a circular economy and sustainable living, this is a serious omission.

Impact Routes – Decision Support, Living Labs and innovation

Q8. Which actions relating to data, data analysis, and modelling should the ENRA research programme prioritise?

We welcome the outcome-driven, whole-system approach in the next programme, designed to deliver meaningful impact. Achieving this ambition will depend on the availability of good-quality data and rigorous modelling and analysis. Policy interventions are best supported by robust, contemporary datasets, thorough data analysis, and rigorous modelling and tools that draw upon them. The pace of societal and environmental change means that exclusive reliance on existing data and models risks basing decisions on models founded on out-dated evidence, knowledge and observations. Therefore, a clear priority is infrastructure that enables models, tools and analysis to address specific questions rigorously and efficiently, through 'smart reuse' of analysis workflows and model components. Directing research towards active Areas of Research Interest (ARI) ensures data, analysis and modelling work are directed towards policy-relevant outcomes. This is important, as modelling and data collection without such direction yields over-simplified work, failing to rise to the challenges posed by real applications.

Q9. What barriers exist to delivering effective data analysis and modelling in the current ENRA Research Programme?

No comment provided

Q10. Which principles relating to the delivery of analysis and modelling are most important (e.g., collaboration, innovation, impact)?

No comment provided

Q11. Is the Living Labs approach for co-production appropriate, and how could it be enhanced or adapted?

The Living Lab approach for co-production is a well-defined model adopted widely by European funders. However, the Living Lab approach outlined in the consultation paper appears to deviate from that well-defined European model. It is therefore with caution that we support the Living Lab model proposed but note that with a European push for harmonisation and standardisation of results between Living Labs, there is potential that adopting a different Living Lab strategy, could place Scotland as a potential outlier in European/UK science. Moreover, we would fully encourage a soils-focussed Living Lab given the notable lack of a Centre for Experience in Soils, compared to say the position for water with CREW.

Q12. Is the Innovation approach well designed? How can it be improved?

Overall, the strategy provides a sound foundation, but to achieve its ambitions ENRA must be more outward-looking, flexible, and equipped to support both fundamental and applied science. A stronger innovation framework, explicit academic recognition, investment in data and AI, and leaner governance will be critical to unlocking the full value of Scotland's research base for policy, practice, and society. However, it is noted that digital innovation is too narrowly focused on biotech and sensor advances with an odd primary focus on Lidar, neglecting shared data across agriculture, human health, and environment domains. Moreover, short programme cycles (3-5 years) are disconnected from the timelines required for technology adoption and impact. Stakeholder input and market steering are insufficiently embedded, which limits responsiveness to industry, farmer, or end-user needs.