Environmental evidence for the future

Vision

This programme of activity will pave the way to addressing crucial challenges and exciting opportunities that present from the UK leaving the European Union, including optimising sustainable environmental management and ensuring the resilience of our ecosystems and the quality of our water and air. At a time when focus is overwhelmingly on short-term requirements, this programme will define, prioritise and address the medium- to long-term knowledge gaps in the environmental science evidence base. It will identify where NERC investments, the wider environmental research landscape and interdisciplinary knowledge can help address these challenges to inform decisions and pioneer innovative policies and solutions. It will take a holistic, systemic and outcome-driven approach.

Key Messages

- The EEF is an independent, co-developed initiative led by NERC.
- The EEF initiative will focus on areas which cut across UK departments and agencies from a position of building on and strengthening the longer term environmental science evidence base, rather than advocating policy stances.
- The EEF initiative will enable the academic freedom to investigate ‘the art of the possible’ in addressing policy and regulatory challenges in innovative ways.

The EEF will:

- enable provision of independent environmental information to address UK public policy and regulatory challenges on medium-long timeframes (+5, +10, +20 years);
- focus on where NERC investments and the wider environmental research landscape can help address these challenges to inform decisions and pioneer innovative policies and solutions;
- enable academic freedom to propose innovative ways to provide such information;
- focus on cross-cutting challenges that address multiple needs across organisations/departments;
- involve other Research Councils/delivery bodies where appropriate;
- complement, not duplicate parallel initiatives.

The EEF will not:

- answer overly-specific or short-term/current evidence needs;
- be prescriptive in how prioritised environmental evidence needs are/should be addressed.

Background and context

EU frameworks and directives have underpinned much of our environmental policy and legislation – from agriculture and fisheries to biodiversity, from carbon emissions and air quality to protected areas, from terrestrial water quality to waste management. Such frameworks have provided important benchmarks around which UK scientists could design studies to help inform policy-making and implementation.

It is clear that following the vote to leave the EU, the UK faces decisions around environmental policy, legislation and regulation, some of which to be made on very rapid timescales. However we also have the unique opportunity to take a fresh and innovative approach to developing and implementing policy and to the provision of evidence to inform that. This will all require a
sophisticated, well-understood and evidence-based approach. This initiative aims to take a futures approach to prioritise and target investments to enhance this evidence base in the medium-to-longer term.

NERC’s position enables a focus on areas which cut across departments taking an independent stance from a position of strengthening the evidence base across policy areas and challenges. This initiative will enable the academic freedom to investigate ‘the art of the possible’ in addressing challenges in innovative ways.

**The initiative**

This initiative will work in close collaboration with UK government departments and regulatory agencies to define key cross-departmental evidence challenges and decisions required post-referendum related to the European environmental policy frameworks under which they are working and which have the scope to be addressed via the NERC community and NERC’s other investments in the medium-to-longer term.

The ambition is to develop a programme of activity that will then prioritise and address these knowledge gaps in the environmental science evidence base to inform policy and practice.

**Approach**

The programme of activity will follow the stages below.

1. Defining and involving stakeholders
   - **June-Sept**
2. Setting, and prioritising challenges and timeframes via theories of change
   - **Oct-Dec**
3. Mapping relevant knowledge status quo
4. Defining research gaps
5. Directing existing knowledge towards challenges
6. Addressing research gaps

A series of regional workshops will identify cross-cutting policy and practice challenges which, if addressed, will enhance the responsible management of the UK natural environment in the medium-to-long term.

Work under the initiative will map the current NERC/environmental knowledge base in relation to emerging policy challenges and highlight where new NERC (and cross-Council) projects could build on that base (via for example reviews/syntheses, new research, or a combination). Key to this approach will be utilising futures approaches to understand what the areas of biggest impact are likely to be, where environmental science delivers to these areas and to draw out prioritised knowledge packages for co-delivery.

Stages 5 and 6 will involve funding tailored calls to the community to begin to address the prioritised challenges. Progression to these latter stages, and their scale, will depend on levels of co-funding and the success of Stages 1-4.
Governance

Executive decisions about the initiative lie with NERC and any programme-level co-funding partners. The EEF advisory group provides impartial steer on the programme and activities.

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<th>The Advisory Group</th>
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<tr>
<td>Prof Andrew Pullin (Chair)</td>
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<td>Dr Andrew Stott</td>
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Partnerships and collaboration

It will be essential to the success of this programme to work with government departments, agencies and devolved governments from the start so that the activities and priorities are truly co-developed and outputs are useful, relevant and have a positive impact.

Partners will be encouraged to be involved at a number of levels:
- As co-funders (financial or in-kind) at the programme, activity and/or project level
- As members of the programme advisory group
- In developing and co-ordinating the programme
- As workshop participants
- As independent critical friends

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