UKRI policy fellowships 2025: fellowship position

Fellowship title: Defra oceanic climate risks fellowship

Fellowship type: Natural Hazards and Resilience fellowship

Host organisation: Defra

Host team: Policy Response and Resilience Unit (PRRU): the central strategic unit overseeing Defra preparedness for and resilience against acute, chronic and catastrophic risks

Summary: opportunity to build a robust evidence base on future oceanic climate chronic risks to inform resilience strategies and policies, helping the UK reduce shocks and maximise opportunities arising from long-term marine climate-related hazards

Policy topic: this fellowship supports the UK government's National Adaptation Programme (NAP) Implementation (up to 2028) and the UK Resilience Framework by assessing long-term oceanic climate chronic risks including, but not restricted to, marine heatwaves, ocean circulation disruptions such as Active Pacific Meridional Overturning Circulation or Pacific Meridional Overturning Circulation (AMOC, PMOC), and ocean acidification. The research will inform policy decisions on biodiversity, food security, and marine-dependent industries while addressing evidence gaps in chronic risks and emerging marine interventions

Research Council: UKRI

Academic discipline(s): climate science, marine sciences, risk and resilience analysis, particularly with a focus on oceanic climate risks and their cascading impacts on ecosystems, society, infrastructure and security

Research career stage: open to early and mid-career researchers

Fellowship structure

Inception phase:

Estimated start date: February 2026. Exact date to be confirmed by the host depending on onboarding and security clearance requirements
Duration: three months
FTE: 0.4 FTE

Main placement phase:

Duration: 12 months
FTE: 0.6 to 1 FTE

Knowledge exchange phase:

Duration: three months
FTE: 0.4 FTE

Work arrangements

Location requirements: the fellow can be based at any Defra hub. Most team members work flexibly across Bristol, York and London. The role allows for hybrid working, ensuring access to Defra's policy networks and resilience initiatives

The fellow may be required to travel for:

- In-person policy meetings and workshops at Defra offices
- Cross-government engagement, including workshops or meetings with Defra, Met Office, Centre for Environment, Fisheries and Aquaculture Science (CEFAS) and Cabinet Office resilience teams
- Stakeholder events and knowledge-sharing sessions

Hybrid working: the fellow can choose to work remotely or from any Defra hub, including those in Bristol, York or London, ensuring flexibility in how they engage with the team. The inception phase may include some in-person meetings for onboarding and engagement with key policy teams, but virtual participation is fully supported.

During the main placement phase, the fellow will take attend in-person meetings at least once per fortnight to collaborate with colleagues and stakeholders. The fellow will have access to Defra's virtual collaboration tools, enabling seamless engagement across policy discussions and research activities. Eligible Travel and Subsistence costs are supported in the main UKRI grant. Please see full call text and guidance for more details

Security clearance: Baseline Personnel Security Standard (BPSS) is required as a minimum for all fellows to begin the role. Security Check (SC) clearance will be required to access certain classified risk assessments, including government datasets related to national resilience planning and cross-government risk management.

SC clearance typically takes six to 12 weeks to process, and fellows should factor this into onboarding timelines. The host department will support the fellow through the clearance process. Additional security requirements may apply depending on the fellow's specific research focus and access needs. Please see National Security Vetting Clearance Levels for further information

Fellowship description

The UK faces growing oceanic climate chronic risks, slow onset but potentially catastrophic changes that could destabilise ecosystems, disrupt supply chains, and threaten national resilience. These risks, including disruptions to ocean circulation (AMOC, PMOC), marine heatwaves, ocean acidification, coral bleaching, and shifting fish stocks, remain poorly understood, particularly in how they interact with acute climate shocks and cascade across sectors.

This fellowship offers a rare opportunity to shape ground-breaking research at the interface of climate science, national security and resilience planning. The fellow will be embedded in Defra's PRRU, working closely with government scientists, policymakers and risk experts. They will have high levels of influence in shaping the research agenda, particularly in the collaborative inception phase, where they will codesign the research focus alongside Defra to ensure findings directly inform UK resilience policy.

The fellow will have the opportunity to:

- Map the knowledge gaps in oceanic climate chronic risks, identifying where evidence is lacking and shaping research needs to strengthen UK preparedness
- Codevelop research priorities with Defra to ensure evidence gaps are identified and addressed within UK policy and resilience planning
- Explore novel research avenues, including scenario-based risk modelling, cascading risk assessments and sectoral adaptation strategies to strengthen UK preparedness for oceanic climate risks
- Lead original research that informs Defra's climate and nature security, and adaptation priorities with the ability to publish findings in academic journals (while being sensitive to data and security requirements)
- Engage internationally, contributing to UK leadership in global discussions on ocean resilience, working with partners such as the United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), and the London Convention and London Protocol (LCLP)
- Design and deliver novel scenario-based risk exercises, testing UK preparedness, for example for ocean-related disruptions, including fisheries, supply chains and critical infrastructure resilience
- Explore the relationship between acute and chronic risks, assessing how slow-onset oceanic climate changes interact with sudden shocks, such as extreme weather events, geopolitical instability or critical supply chain failures

The fellow will benefit from:

- Direct policy impact, ensuring research findings actively inform resilience strategies, including the National Risk Register (NRR), Climate Change Risk Assessment (CCRA) and the Climate and Nature Security Strategy
- Knowledge exchange opportunities, including policy roundtables, cross-government workshops and international climate security networks
- Access to novel datasets related to UK oceanic climate risks, fisheries resilience and national security risk assessments
- A dynamic, cross-disciplinary research environment, working at the intersection of climate risk, resilience and policy
- Opportunities to publish academic research, ensuring that findings contribute to wider scientific and policy discussions while adhering to necessary security protocols

While climate change presents risks, it also creates new dynamics in marine ecosystems, with potential shifts in commercially viable fish stocks. Understanding and harnessing these changes will be crucial for strengthening UK seafood security and economic resilience, alongside efforts to mitigate the cascading risks of oceanic climate hazards. This fellowship provides a rare opportunity to shape research at the intersection of climate science, resilience, and security. The fellow will co-design research priorities with Defra, develop evidence-based risk assessments, and contribute to policy frameworks that enhance the UK's ability to anticipate, adapt to and mitigate slow-onset oceanic climate hazards. Through engagement with scientific, policy, and international resilience networks, the fellow's research will directly influence UK national security planning, adaptation strategies and global governance on ocean resilience.

Person specification

Applications will be assessed by UKRI panel assessment against the following essential opportunity-specific requirements in addition to the generic eligibility and call criteria:

Essential criteria:

- Expertise in a relevant academic discipline, such as climate science, marine risk analysis, environmental science, oceanography, resilience planning or ecological economics
- Experience or demonstrated potential in conducting interdisciplinary research, particularly in bridging scientific understanding and policy to tackle complex environmental challenges
- Strong analytical skills, with the ability to synthesise complex data and evidence from diverse sources and translate it into policy-relevant insights related to climate risks, ecosystems and infrastructure
- Proven ability to design, lead, and manage research projects, including risk modelling, scenario analysis, or resilience planning exercises to address emerging environmental threats
- Excellent communication skills, with the ability to present complex scientific information clearly and effectively to both specialist and non-specialist audiences, ensuring actionable policy recommendations

Applicants shortlisted from the panel assessment will be assessed at the host led interview selection process against the following desirable opportunity-specific requirements:

Desirable criteria:

- Skills or strong awareness in cross-sector collaboration, engaging with scientists, policymakers, resilience planners, and industry bodies like Seafish, to ensure science informs policy and decision-making
- Experience in knowledge exchange, particularly in translating research into practical policy applications and facilitating dialogue across government and research communities
- Familiarity with UK climate resilience frameworks, such as the NRR, adaptation strategies, and security risk assessments, with an understanding of how oceanic risks fit into these broader structures
- A demonstrated interest in pioneering research, particularly in under-researched areas of climate and oceanic risks, allowing the fellow to contribute to critical knowledge gaps identified in the fellowship

Processing personal data

If applicants are shortlisted by the UKRI assessment panel UKRI will need to share the application and any personal information that it contains with the host for the host led interview selection process.

Your personal data will be handled in line with UK data protection legislation and managed securely. If you would like to know more, including how to exercise your Rights, please see the UKRI privacy notice.

Defra's privacy notice can be found here: Defra's research privacy notice. Hosts will delete your data at the end of the selection process unless you are successful, in which case we will retain your data as an independent data controller.