The SPF UK Climate Resilience Programme: enhancing the usefulness and usability of research for climate resilience

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11th June 2021







UK Climate Resilience Programme

Vision: To enhance the UK's resilience to climate variability and change through frontier interdisciplinary research and innovation on climate risk, adaptation and services, working with stakeholders and end-users to ensure the research is useful and usable.

Climate risks

Characterising and quantifying climate-related risks to the UK

Climate adaptation

Managing climate-related risks through adaptation

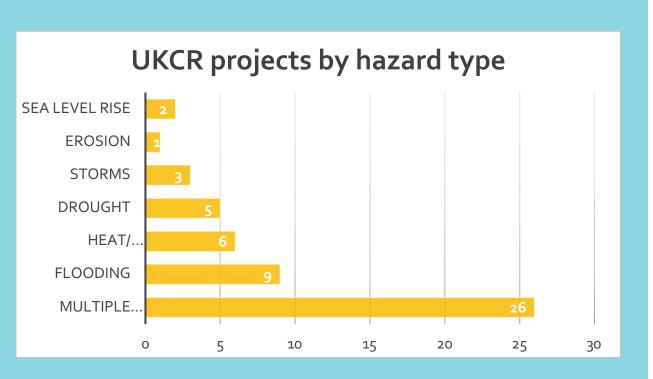
Climate services

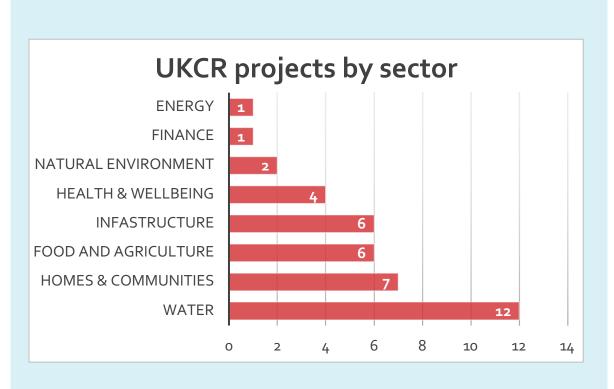
Working with partners to turn climate information and knowledge into action and usable services



UK Climate Resilience (UKCR) Programme projects by hazard and sector











What kind of climate information do we need to make decisions?

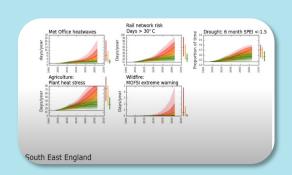




SEARCH: Sensitivity of Estuaries to Climate Hazards. Evaluating climate flooding hazards in UK estuaries to provide new inundation and likelihood data for the Environment Agency, Natural Resources Wales, and Scottish Environment Protection Agency drawing on observations and new modelling.

Climate risk indicators:

Developing user relevant indicators of climate risk using UKCP18 to support risk assessments. The initial dataset includes metrics from sectors that include energy, transport, agriculture and health. New work is producing a web based delivery system for the results





UK Shared economic pathways for climate research and policy (UK-SSPs): developing a set of internally consistent socioeconomic scenarios for the UK which will provide the basis for further UK research on climate risk and resilience.

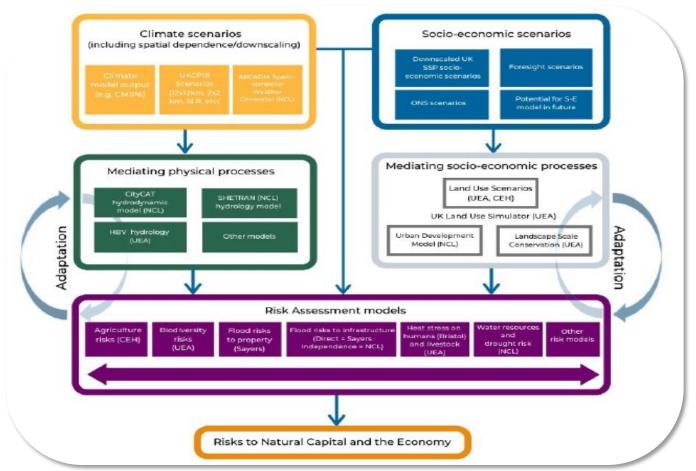




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Open Climate Impacts Modelling Framework (OpenCLIM): enhancing the UK's climate risk capability through the development and implementation of an advanced open modelling framework and nurturing a community of developers and users to ensure long term sustainability.







How do we plan more effectively for a changing climate given the known risks?





ARID: School buildings adaptation, resilience and impacts on decarbonisation in a changing climate

Daniel Shimizu

ADAPTATION & RESILIENCE:
Planning & action for Manchester

Dr Paul O'Hare





Developing an urban heat resilience plan for Bristol

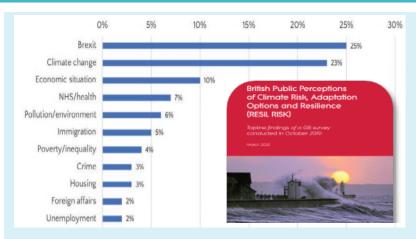
Charlotte Brown





How do we ensure research outputs are relevant, usable and mobilise action?





Understanding UK perceptions of climate risk and resilience (RESIL-RISK) Nationally representative survey of perceptions of climate risk and existing support for climate change adaptation strategies and insight into why this is and how opinions are formed about how to respond.



Mobilising Adaptation: Governance of Infrastructure through Co-Production (MAGIC) Developing a community-led approach to reducing flood risk, whilst providing opportunities for flood-vulnerable urban residents to improve health and wellbeing, through better engagement with blue and green spaces.



Climacare: governing the climate adaptation of care settings
Understanding the human behaviour, organisational capacity and governance to enable the UK's care provision to develop adaptation pathways to rising heat stress under climate change.





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Living with Climate uncertainty

The Risky Cities project, Hull, will develop research-informed learning histories for flood prone Hull. These will then be utilised in community-based arts and heritage interventions and large-scale productions developed in collaboration with project partners Absolutely Cultured and the National Youth Theatre.



Community climate resilience - Manchester

How a community **articulates its perspectives** on social justice and equality with regard to climate resilience; how interdisciplinary creativity can be researched and applied to **activate community** climate resilience; how a community can **create**, **own and embed** creative outcomes for resilience; the means to best **transfer these methods to policy-makers** for wider implementation.





How do we ensure the quality and value of climate services? Do we need a national framework?



SPF UKCR is focusing on this issue by understanding the organisational barriers and identifying steps to enable upscaling. E.g.

- Investigating the need and form of a UK national framework for climate services (NFCS): This is focused on the practical aspects of delivering national-scale climate services.
- Review of climate resilience
 mainstreaming into regulatory and
 voluntary standards, national guidance,
 and other sectoral/industry codes of
 practice

Other projects focus on understanding need for UK climate services:

- Standards for climate
- Valuing climate services
- Understanding upscaling of climate services



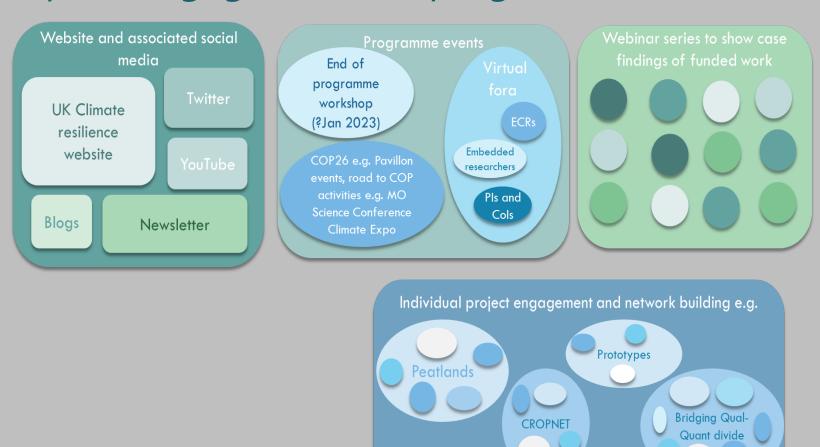






Connecting with the programme

Ways to engage with the programme:



www.ukclimateresilience.org