

Towards a UK climate change adaptation knowledge exchange activity

Recent international policy developments have highlighted the need for knowledge targeted at informing action on climate change adaptation. Yet within the UK, recent changes have seen the demise of many of the support activities, such as the Defra/EA Climate Ready Support Service and some of the Regional Climate Change Partnerships, which provided research-based information to organisations adapting to a changing climate. At the same time, research into adaptation and resilience to climate change has become considerably more extensive and diverse, covering numerous issues at the local, regional and national levels and across all sectors.

These changes have contributed to a mismatch and potential fragmentation between the provision of appropriate evidence from research and the ability of policymakers to find, synthesise and use the latest information to inform the decision-making process. In addition, researchers' links with policy and decision-makers have also become less systematic diminishing the opportunities for their research to be informed by potential stakeholders' needs and priorities. In both cases, there is a reliance on existing contacts and *ad hoc* interactions, which with the churn in positions can be somewhat limiting.

A mechanism is needed to remedy this situation and to provide critical support to climate adaptation policy, risk and adaptation assessments and research processes by communicating evidence from research and by identifying knowledge gaps and coordinating efforts to address them. Overall, the aim of such a mechanism should be to improve the connectivity between research and policy and to improve the two-way flow of information in both the short and longer-term.

Background

Interviews were held with nine key climate adaptation policy and policy-informing organisations¹ to help identify the need, nature and potential scope of an approach to deliver the required knowledge exchange.

All organisations were supportive of the general, overarching need for enhanced knowledge exchange activities to facilitate the delivery of information to support policy decisions and would value a mechanism to improve the current, fragmented approaches to seeking evidence from research. Much good work (and significant investment) has already been achieved and there was concern that recent changes would limit the ability to maximise and build on this into the future.

Suggestions were made as to the potential scope, approach, timing, different mechanisms and means of supporting (e.g., funding) such a knowledge exchange activity.

¹ Adaptation Scotland, ASC, ClimateNI, ClimateXChange, Defra, EA, NRW, RIDE Forum, Welsh Government

1. Scope

Two main aims were identified:

- a. to influence and inform researchers and the research funding process to help direct and support contributions from research investments to meeting policy requirements for evidence.

Policy reviews etc. often identify evidence gaps, but what is missing is the opportunity to stimulate the process towards meeting these requirements. Interacting with researchers, research councils and other funding organisations on a regular basis would provide opportunities to work with academics towards addressing priorities within new proposals and draw out relevant outcomes from existing and on-going research. It would also help inform and help direct strategic funding cycles. Streamlining and strengthening this networking process would provide an efficient step towards meeting evidence gaps.

- b. to provide an efficient route for users to find and access up-to-date and relevant research outputs suitable for integration into the policy process.

The systematic mapping of the latest research, the coordination and analysis of research information and the provision of synthesised evidence were all highlighted as activities which need to be strengthened and broadened to help inform policy, and which go beyond just information-sharing to more actively addressing evidence needs. An efficient two-way flow of information would help align interests on both sides and help identify synergies and complementarities. The provision of a neutral space for sharing of knowledge and resources and as a focus for highlighting and accessing further information would also be of considerable value.

2. Approach

Adaptation research is very diverse and broad-ranging making it increasingly difficult to engage with the wide spectrum of research (beyond the day job). A systematic approach to identifying specific knowledge and evidence priorities would be needed, influenced by policy initiatives and timetables. A balance would also be needed between focusing on very specific issues/sectors to achieve buy-in from stakeholders and the wider engagement necessary to facilitate an effective network.

A UK-wide approach was valued in that it would ensure a critical mass in specific areas (industry and industry-related policies tend to have a national focus) but with dedicated representation at the devolved/regional level. Non-devolved issues would be of particular interest.

One complementary approach would be to focus on skills and capacity as a starting point; thinking about the process of integration is important, and looking to develop the ability and expertise to integrate research outputs with risk and adaptation assessments, policy and decision-making processes.

3. Timing

Now is an appropriate time to consider such a KE activity:

- Climate change adaptation is an on-going issue, but its diffuse and long-term nature mean it is never seen as an urgent priority within policy. However, knowledge and engagement needs to

be continued at a level at least sufficient to maintain skills and expertise in this area capable of informing current policy and of responding to changing (increasing?) policy requirements.

- Several policy-support activities have recently been lost. Enhanced knowledge exchange at this time could better link the policy landscape with supporting research helping to ensure information and evidence from existing research investments is not lost, and adding value by strengthening uptake and use.
- Current policy activities related to the national adaptation programmes, the CCRA, and specific initiatives such as UKCP18, provide an immediate timeline and priorities for evidence requirements in both the short and longer term.
- Recent extreme events have highlighted the need for continued adaptation action across a broad audience; the underpinning research also links with the currently expanding work on climate services and the increasing focus on promoting UK expertise more globally through GCRF initiatives.

4. Structure

Various possible mechanisms were discussed, but key attributes for any activity include:

- Led by a champion with energy and ability (consider leadership by a knowledge integrator/broker, rather than an academic or practitioner)
- Focus solely on KE aspects so no specific research remit/funding
- Establish close links with existing networks and adaptation-enabling services, including those across the UK to broaden and strengthen engagement and outreach through established fora.
- Be sufficiently flexible to respond to evolving policy requirements.
- Look to ensure sustainability: a sustainable presence is needed to maintain engagement and to drive activities forward.

On potential mechanisms, a wide range of possibilities exist, in part linked to the funding options as outlined below. To address continuity and legacy issues, any approach is likely to need an initial phase to establish the process and include work looking to scope possibilities for sustainable follow-on phases.

5. Funding Options

Adapting to climate is a continuous learning and improvement issue and any KE initiative needs to be sustainable into the foreseeable future. The challenge is to find a means of supporting such a mechanism that recognises limitations in financial (and human) resources yet the need to provide a robust platform for continuing activities. Possibilities identified (which are not mutually-exclusive and could be combined in various ways) include:

- Research council funding: A cross-council (UKRI) KE network initiative would be appropriate but funding beyond 5 years is unlikely. This could be used as a first step in establishing a credible activity which would become self-funding in the longer term.
- In-kind funding: Bringing together interested parties on a regular basis (at no additional cost), possibly engaging strongly through existing professional and membership networks.
- Membership funding: would need to identify very specific value and outputs to encourage participation.

- Provision of services: develop a range of services (e.g. data portals) which have commercial value. The first phase could be funded by research councils to establish the product, with activities then sustained by commissioned work.
- H2020, ODA/GCRF-type funding: Seeking funding as a means of establishing a capacity that would be specifically focussed on contributing to, and learning from, efforts and solutions in other countries and demonstrating UK expertise and leadership in this area.

It was envisaged that this would be a KE network and would not include specific funding for research. Information generated through this network would be used by researchers to inform the development of proposals and to inform and target research council and other funding source investments in research, including the time-limited research needs as identified through the KE activities.

6. Potential barriers

A number of potential barriers were identified:

- Lack of resources (particularly time) and competing priorities limiting engagement
- Too broad to be useful (due to the nature of adaptation)
- Inappropriate balance between very focussed activities versus broader engagement work
- Limited understanding and engagement of the relevant research base
- Mismatch in timing between policy requirements and the provision of research outputs
- Internal resource too small to maintain momentum and continuity
- Difficulty in blending innovation aspects to complement the research.

Potential options

There is considerable interest in having available an adaptation knowledge exchange network building on existing initiatives and in-house expertise that engages policy, practice and research communities. The overall aim of such a network should be to improve and sustain connectivity and the flow of relevant adaptation information between policy, practice and research. In doing so, the objective is *to provide critical and relevant support to climate policy, risk and adaptation assessments and research processes by communicating the latest outcomes and evidence from research, and identifying knowledge gaps and facilitating coordinated efforts to address them.*

The desirable characteristics of this network are:

- A focus on knowledge exchange and mobilisation engaging policy, practice and research communities;
- A systematic approach to identifying specific knowledge and evidence priorities informed by policy initiatives and timetables; but also respective of research timetables;
- A UK-wide approach that engages, builds on and enhances what is already working; pooling resources of related existing initiatives to focus on filling identified priority knowledge exchange and engagement gaps, and focusing on aligning interests and identifying requirements; and
- A sustainable and flexible initiative that can evolve with changing requirements and learn from engagement.

In delivering this network, there is scope for consideration of different delivery and funding options. It is suggested, however that some level of funding will be needed for an initial period of 3-5 years to kick-start this initiative, engage the relevant policy, practice and research communities and to pilot, deliver and demonstrate value added. The required funding includes that needed to support an identifiable lead and a basic core team that would: facilitate the appropriate engagement; provide the leadership and facilitation necessary to deliver the initiative as per the objectives and commensurate with the level of funding; and provide the focus for defining and establishing a sustainable and flexible follow-on initiative. It also includes a base level of funding to support appropriate engagement activities related to evaluating the need for, and scoping out and establishing a sustainable legacy initiative following on from the initial network.

Delivery options beyond this are:

Network operating as a convening group engaging existing initiatives: This option would draw together existing initiatives and in-house expertise into a convening group that would focus on engaging to share knowledge and identifying and delivering knowledge exchange priorities. The focus would be primarily on aligning interests and identifying opportunities to engage the broader adaptation community or portions thereof. Engagement activities would focus on those deemed as priorities and would be funded by the interested existing initiatives. The added value of the network would come from its KE and engagement; and from broadening and strengthening the impacts and benefits of the engagement. This option would have a natural lifecycle; reflecting the interests, willingness and abilities to support activities by those engaged (members of the convening group).

Network with information and communication fora: This option includes bringing the UK adaptation community (policy, practitioners and research communities) together at regular intervals to showcase the outcomes from the latest adaptation research, to explore the potential impacts of those outcomes within policy and practice, and to provide opportunities for dialogues related to knowledge and evidence gaps - an information and communication forum not a scientific meeting. The frequency and scope of these fora (potentially focused on a particularly sector, policy or practice area) would be defined by the community and their agendas, and by the level of funding available (would need to manage expectations). It would require an enhanced level of engagement and synthesis that could be met by increased engagement of the community and / or increasing the capacity of the network core team.

This option could be standalone or work in combination with the convening group option. In the latter case, these fora would be in addition to those meetings undertaken as part of the convening group option, with the showcases being used to align activities and highlight areas where further engagement is needed to better define and fill identified priority knowledge exchange and engagement gaps.

KE and engagement network with full responsibility for activities and outcomes: Under this option the core team would have sufficient resources to effectively engage the UK adaptation community, but also to link that community with similar efforts internationally (e.g., Global Centre of Excellence on Adaptation). It would include engagement as per the above two options, but with the core team taking on more of the responsibilities associated with the engagement and follow-up actions, including more targeted communications with the broader adaptation community (e.g., syntheses, reports and challenge briefs) and a strengthened distributed network across the UK. Links internationally would involve establishing and providing a window for the flow of information. This would include bringing to deliberations within the UK relevant expertise, research results, syntheses of knowledge and evidence, and efforts related to addressing gaps; sharing lessons learnt and challenges around knowledge exchange and engagement.

As in the previous options, this option would also include an exploration of means of sustaining the network. Under this latter option, the intention is not necessarily to sustain the follow-up initiative at this level, but rather to effectively use the available resource to also put in place the relationships and KE mechanisms that will facilitate the delivery of this activity under a variety of delivery models. As such, this option includes a more focused legacy assessment.