Providing user-informed guidance to support adaptation

EMS Annual Meeting

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UK Climate Impacts Programme

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Outline

- Introduction to the UK Climate Impacts Programme (UKCIP
- Overview of UKCIP guidance and support
- Lessons learnt through working with users on:
  - the adaptation process
  - the provision of specific tools and resources
- Concluding perspectives

UK Climate Impacts Programme

Origins of UKCIP

The UK Climate Impacts Programme (UKCIP)

"helps organisations adapt to inevitable climate change".

- Set up by UK Government in 1997
- Funded primarily by Defra
- Based at Environmental Change Institute, University of Oxford

Why established?

- **Top-down research was not delivering information to facilitate decision-making on adaptation**
- **Previous research not integrated:** hard to draw conclusions about vulnerability of UK to climate change and set adaptation priorities

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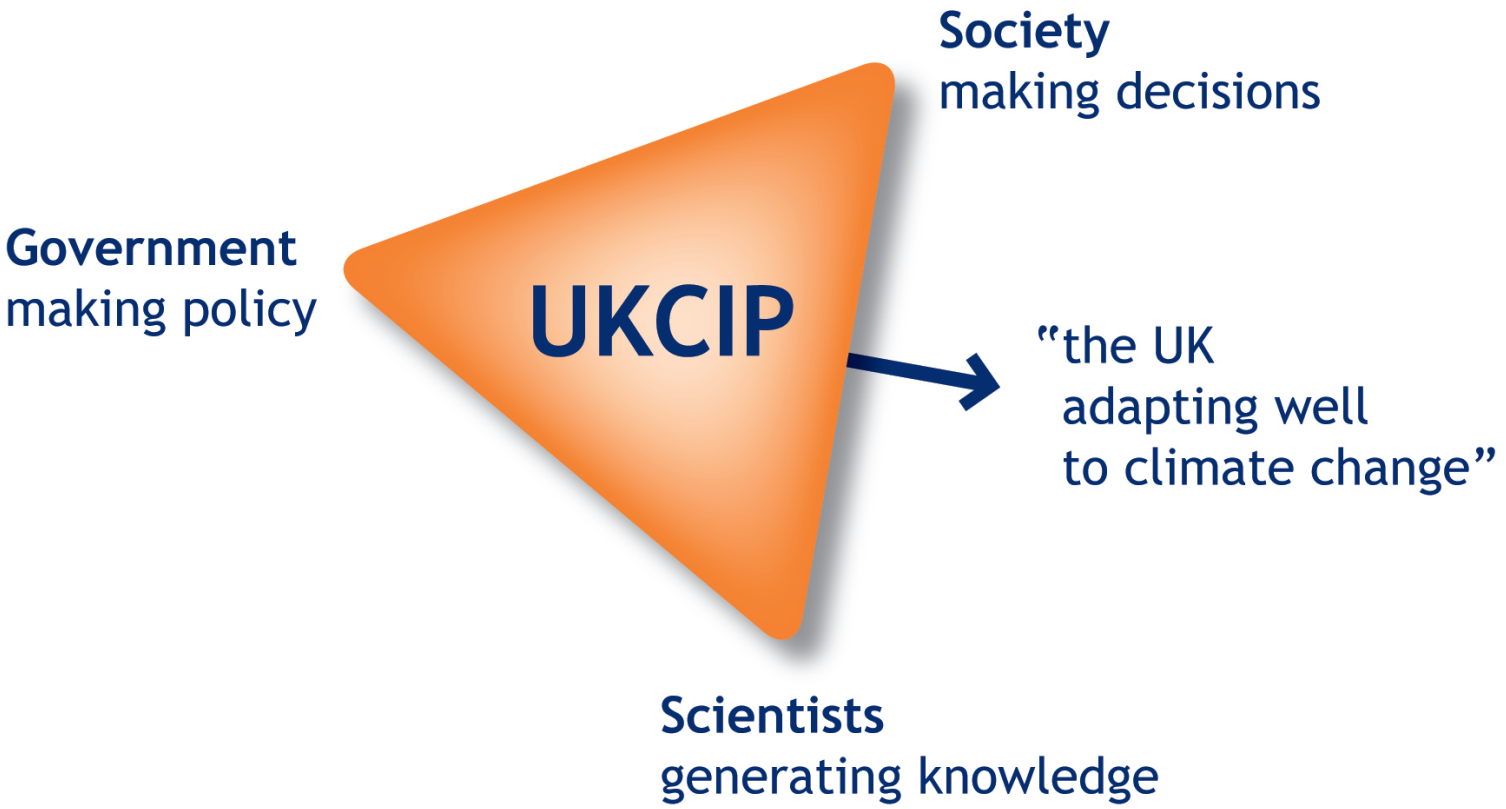
UKCIP as a boundary organisation



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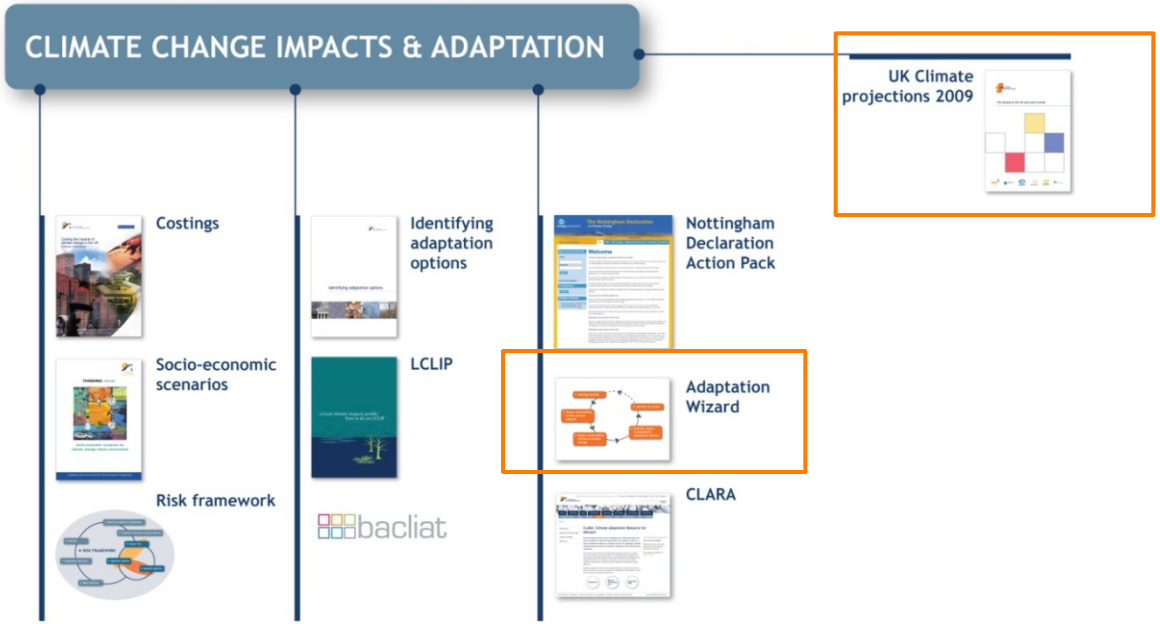
What support does UKCIP offer?

UKCIP :

- Established stakeholder-led projects across sectors and regions
- Provides common tools, guidance and advice to support adaptation assessments
- Supports ongoing climate adaptation partnerships
- Builds capacity
- Communicates and disseminates findings



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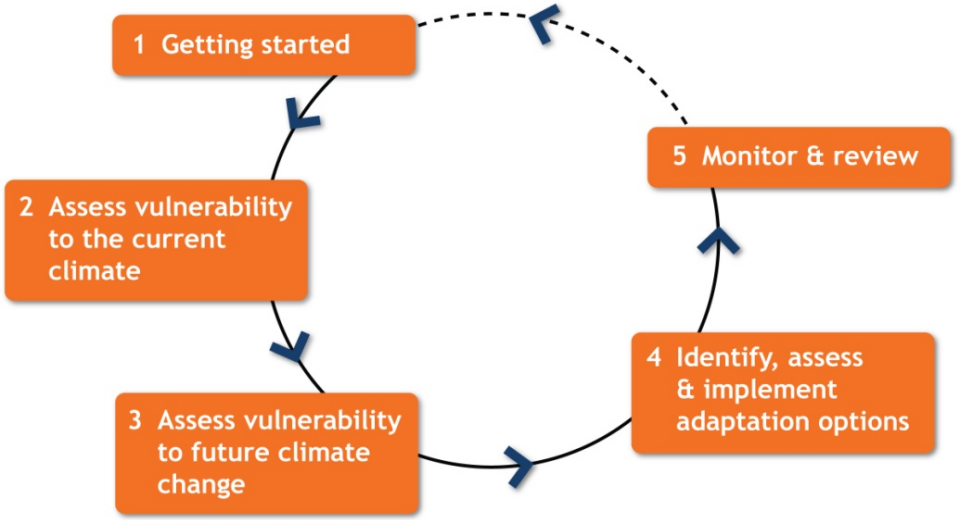
What is the Wizard?

- **An on-line tool to help organisations adapt to climate change**
- **Based on established risk assessment methods (Willows and Connell, 2003)**
- **Key features:**
  - Accessible language and presentation
  - Practical: addresses ***how*** *and* ***why*** not just ***what*** to do (information, tasks, templates)
  - Strong intellectual basis
  - Interactive and participative
  - Flexible, generic



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Lessons learnt on adaptation process (1)

- **Climate risk assessments must be linked to a particular decision-making event or question** to result in practical actions on adaptation
- **Don't underestimate the importance of "Getting started"**
- **Scope the problem and set objectives:**
  - what it is you really wish to achieve?
  - what are your desired outcomes?
  - eg: "*achieving my organisations key objectives in the face of changing weather and climate*."

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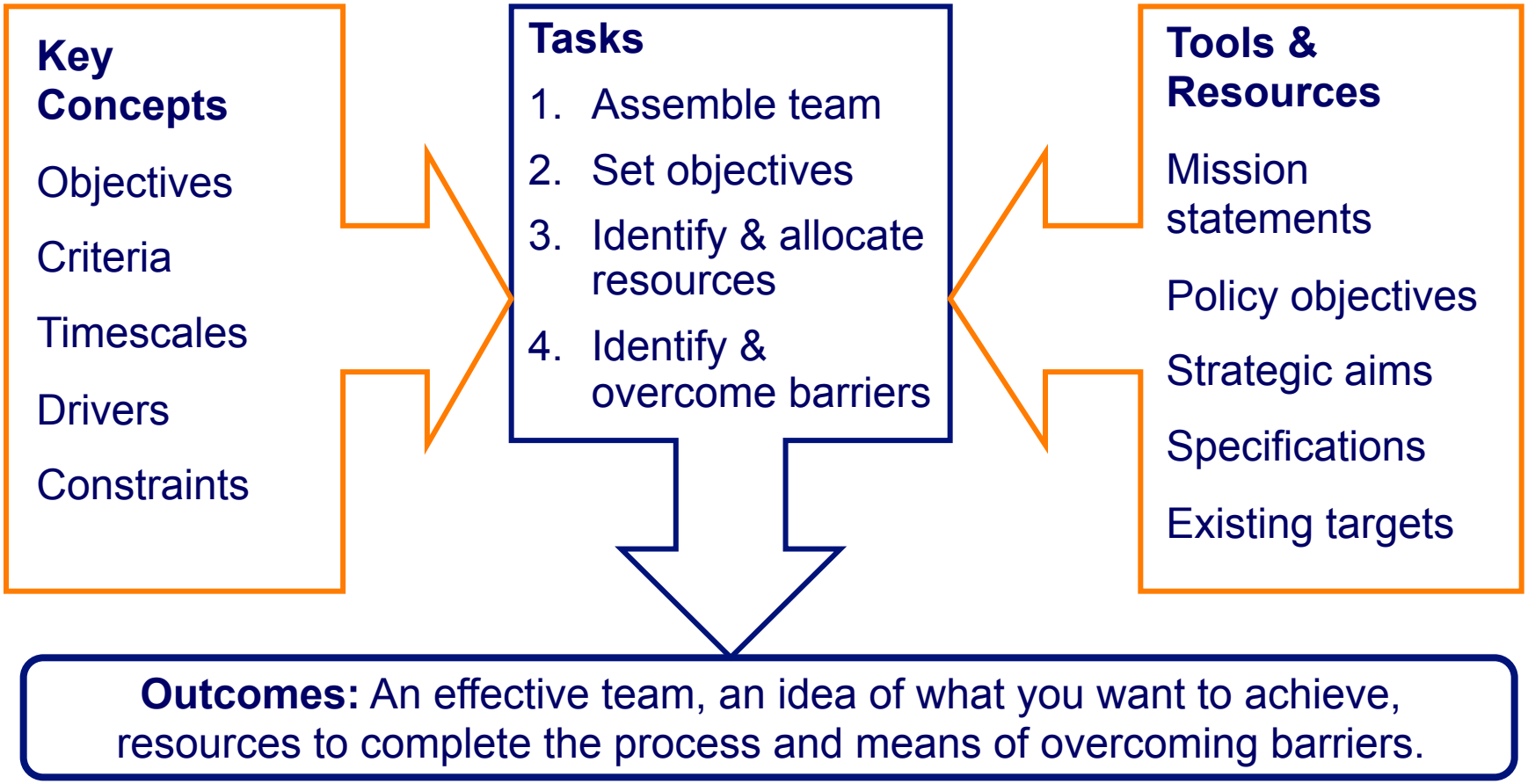
Step 1: Getting Started

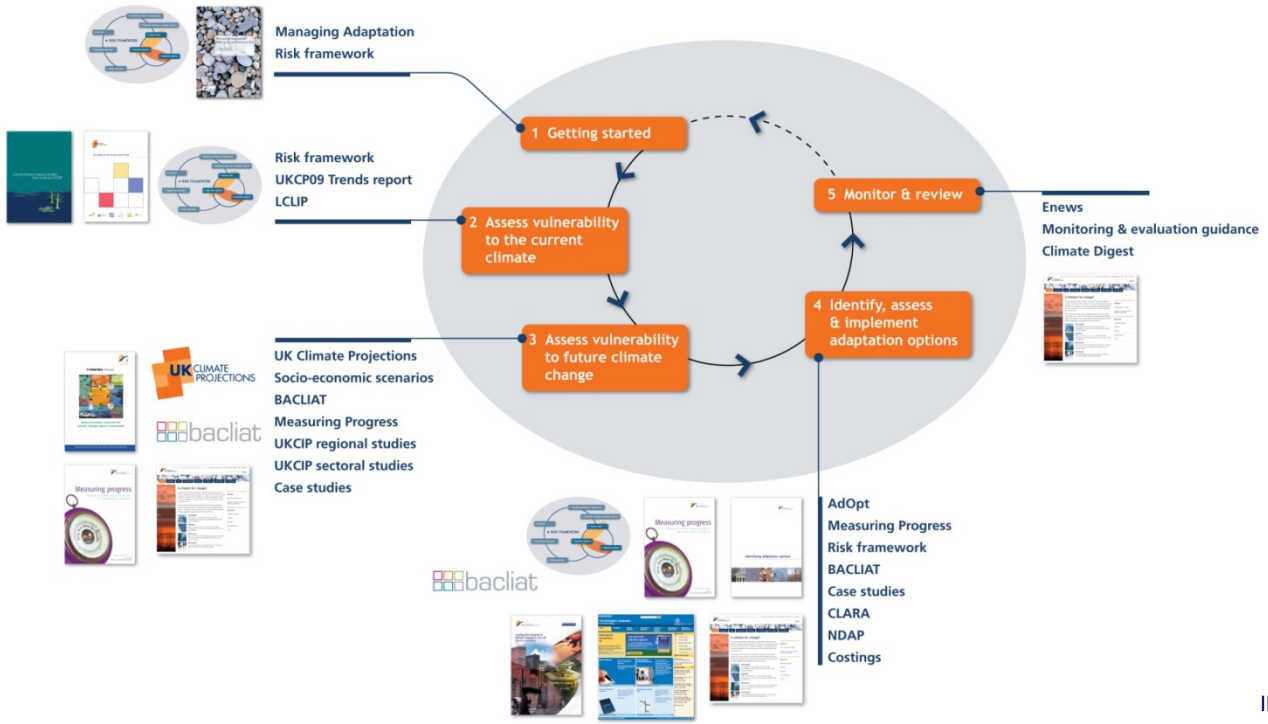
Step 1 helps you put in place all that is needed to work through the Adaptation Wizard and start helping your organisation to adapt.



Outcomes: An effective team, an idea of what you want to achieve, resources to complete the process and means of overcoming barriers.

Lessons learnt on adaptation process (2)

- **Anchor assessments in an understanding of your current vulnerability:** more tangible, helps assess current adaptive capacity
- **Do not start with the climate projections:** the climate science can be a major barrier to making progress on adaptation
- **Adaptation is iterative:** learn, monitor, evaluate



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UKCP09 (UK Climate Projections 2009)

- **Fifth generation of future climate information for UK**
- **Development and delivery closely informed by the user community**
- **Produced by a consortium led by the UK Met Office and funded by UK Government Department for the Environment, Food and Rural Affairs (Defra)**

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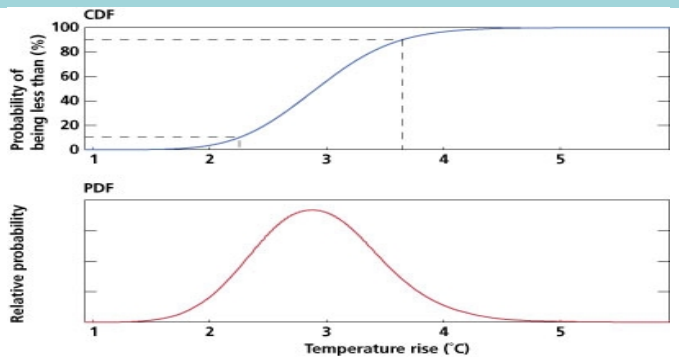
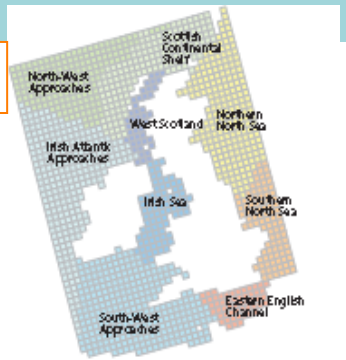
Development: responding to users requests



Uncertainty

Marine

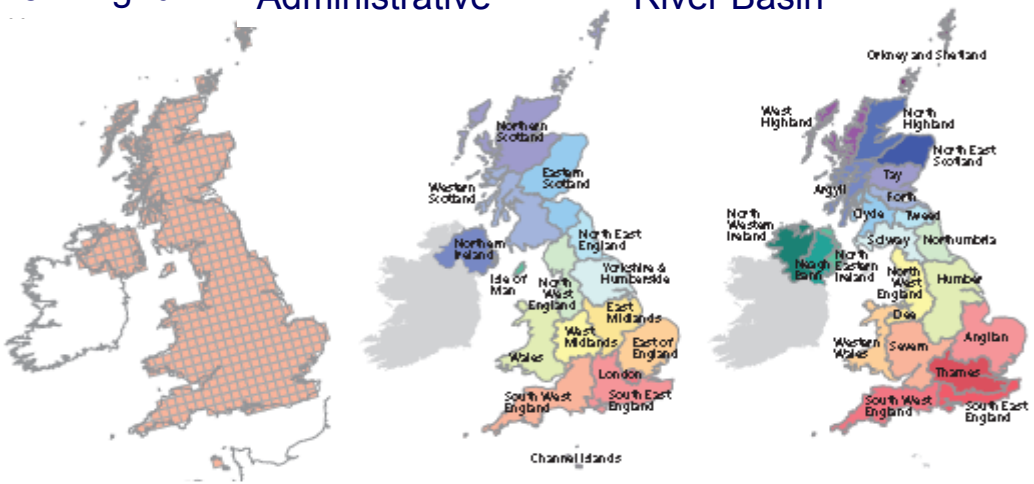


Spatial resolution

25 km grid

Administrative

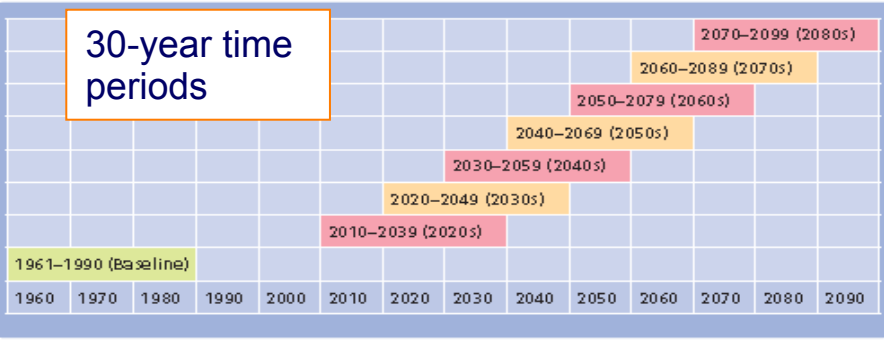
River Basin



Variables

Variable	Unit	Change	Temporal averaging
Mean daily temperature	°C	°C	Month, season, year
Mean daily maximum temperature	°C	°C	Month, season, year
Mean daily minimum temperature	°C	°C	Month, season, year
99th percentile of daily maximum temperature	°C	°C	Season
1st percentile of daily maximum temperature	°C	°C	Season
99th percentile of daily minimum temperature	°C	°C	Season
1st percentile of daily minimum temperature	°C	°C	Season
Precipitation rate	mm/day	%	Month, season, year
99th percentile of daily precipitation rate	mm/day	%	Season
Specific humidity	g/kg	%	Month, season, year
Relative humidity	%	% (of %)	Month, season, year
Total cloud	fraction	%	Month, season, year
Net surface long wave flux	W/m²	W/m²	Month, season, year
Net surface short wave flux	W/m²	W/m²	Month, season, year
Total downward short wave flux	W/m²	W/m²	Month, season, year
Mean sea level pressure	hPa	hPa	Month, season, year

30-year time periods



Temporal resolution

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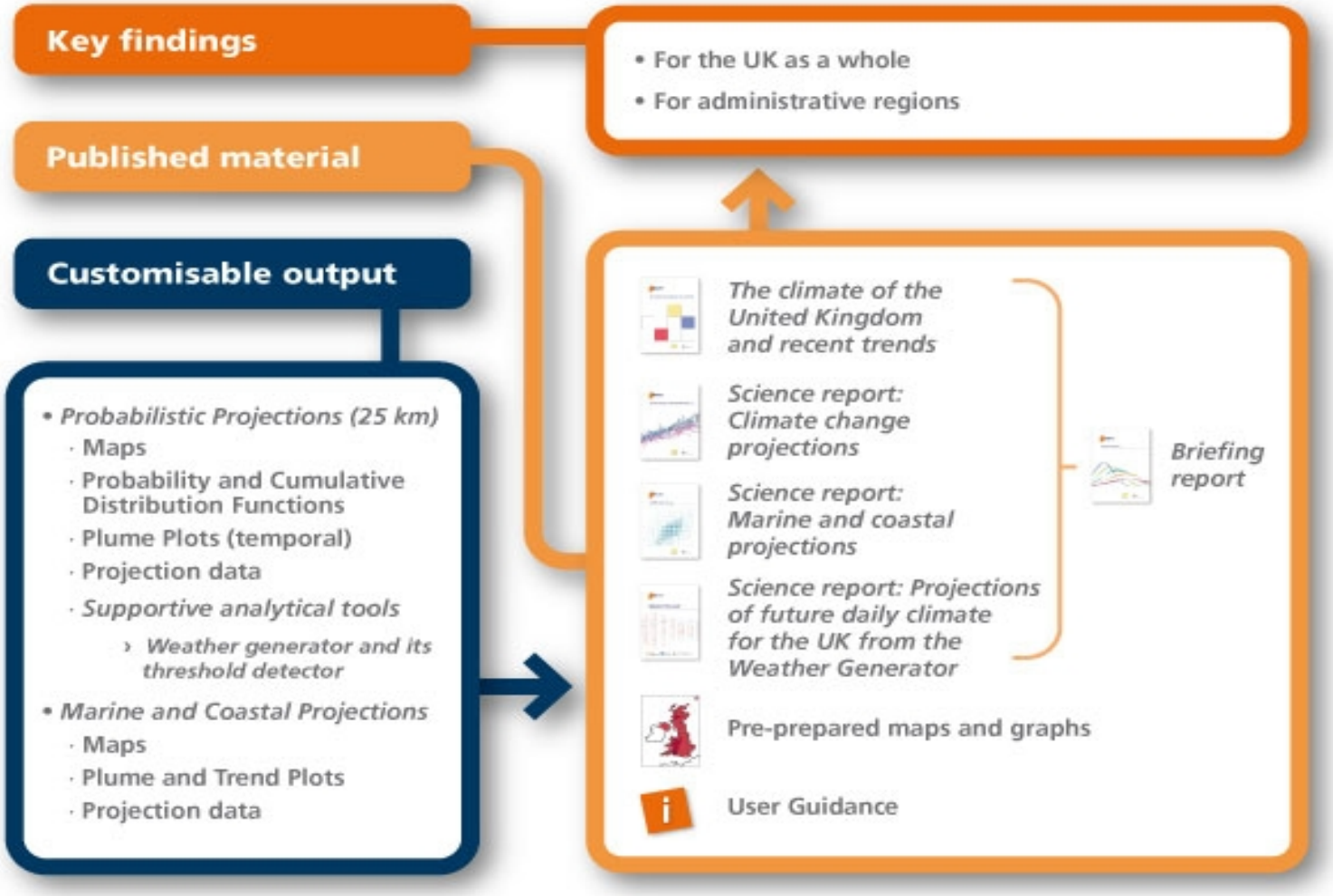
Delivery: responding to users requests



UK CLIMATE PROJECTIONS

Ongoing support for UKCP09

Delivery of the tool (or product) is just the start – ongoing dialogue and collaboration is needed to ensure users needs are met

UKCP09 supported by…..

- **User guidance:** address sections that users find complex, FAQs and how not to use
- **Case studies of use:** in response to demand
- **Helpdesk:** phone and email enquiries answered
- **Online Forum:** helps connect users working on similar issues
- **Training:** e-learning, webinars, training workshops
- **Users workshops:** feedback on advantages and limitations of UKCP09 to feed into further development of user guidance

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Concluding perspectives

- **Information alone does not lead to action**
- **Know your users and their evolving requirements:** varied, relevant, simple
- **Engage users from the outset and throughout**
- **Manage the tension between accessibility and completeness:** understand trade-offs and make appropriate choices
- **Even the simplest tools require support:** advice, guidance, training and case studies all facilitate engagement and use of tools
- **There is no 'one size fits all' :** tailoring is essential – generic v specific
- **Match information and methods to the problem at hand**

Decision-relevant guidance and support cannot be developed without close collaboration with users

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www.ukcip.org.uk

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