



Step Three

Identify and Prioritise Actions

Developing Your Action Plan

The final step ahead of Workshop 2 is to identify a list of draft adaptation actions. From the outset, it must be understood that this initial plan is imperfect by its nature and will not address every possible risk. Neither should this plan sit separately from other plans and remain dormant until a review five years later. This is the beginning of a monitoring process which, if built up year on year, will improve and itself adapt over time. Therefore, a number of actions will seek to address issues now through practical projects, while others build towards breaking down the barriers to the high priority risks you identified, through change in behaviour, policies, communication and decision-making. An issue as systemic as climate change requires a dynamic and wide-ranging suite of actions, albeit anchored in the clear vision and aims which it is everyone's job to help meet.

Remember the scope and vision of your adaptation plan. This should guide the nature and ambition of your actions, while the risk register provides the priorities for action and the themes/outcomes provide the structure of the action plan.

Build Your Action Plan:

- Use the risk register to define the priority climate risks for your organisation.
- Develop actions to address these priority risks and allocate them under the relevant theme and outcome.
- Add any additional actions required to meet the outcomes within the various themes.
- Map the draft action plan against your climate risk register; reviewing the amending to meet any gaps.
- Define the following for each action: responsible team, funding sources, relevant external bodies, milestones. implementation, funding sources, relevant external bodies, and milestones.

Review and Co-Design:

- Take these suggested actions alongside your draft Risk Register and Vision, Aims and Themes to the working group for review in Workshops 2 and 3.

- This process of action plan development can be extensive and will likely require a simultaneous series of on-to-one meetings with senior staff, in order to get comment, buy-in and agreement on the draft actions. Contact Climate NI for further advice on this.
- It is then up to you to define the process in order to pass the draft adaptation plan through committee or board level.

Ahead of Publishing Your Plan:

- Use the publication of the action/plan strategy to build further awareness and support for implementation. Infographics can be used to clearly communicate key facts/messages contained within the strategy/plan. A briefing for senior leaders will also be important.

Types of Actions

Just as with development of the themes for your plan, there are two key ways to think about actions. [Scotland Adapts: A Capability Framework for a Climate Ready Public Sector](#) details how adaptation actions can be categorised as those which either¹:

Build adaptive capacity – Actions which develop your organisational ability to effectively respond to climate change. This may be through enabling supportive governance for adaptation, producing guidance, creating or collating relevant information and research, raising awareness about the need to adapt or supporting social structures for adaptation such as working in partnership.

or

Deliver adaptation actions – Actions that reduce physical impacts or take advantage of opportunities associated with climate change. Actions may reduce or avoid exposure to climate risk, such as building flood defences, or exploit opportunities through changing practices to take advantage of climatic changes.

Examples of Actions - Build Adaptive Capacity

Communication

Adaptation to climate change is a complex issue which requires long-term, structural direction and societal transformation. This means that developing organisation-wide communication and decision structures with proper resource allocation, is probably the fundamental aim of your first plan. Communication actions raise awareness of climate change impacts on the local area and the benefits of proactively planning for adaptation.

Examples:

- Provide climate change training to Parks employees and volunteers: how is my service at risk from climate change and how can this be addressed?
- Provide climate change training and engage with elected members.

Evidence

Lack of available evidence is one of the key barriers to action. For example, if you cannot fully assess the cost of staff overtime for a given emergency, then any business case for adaptation won't reflect the true economic cost and benefit of taking action.

Examples of the types of evidence gathered can be: how the climate is changing, an information baseline for a given asset or area, what the risks are for a specific area or the consequences of service disruption.

Examples:

- Develop intelligent information management systems including reporting mechanism to record damages, increased staffing and resource costs associated with severe weather events and gradual change.
- Undertake audit of property & assets – assess risk from flooding, heat, storms.
- Undertake climate risk and opportunities assessment for all council capital projects .
- Work with universities to conduct research to determine the future evolution of vulnerability at the local scale
- Coordinate with spatially adjoining local authorities to map out future climate risk across the region.

Examples of Actions - Deliver Adaptation Actions²

It is important to note that adapting to climate change is no more novel or complex than many other tasks of local governance. A large number of the adaptation actions available to planners and policymakers at the local scale are already in use in some form, requiring little more than a change in the scale or focus of existing management efforts to orient them towards greater climate resilience. Delivering adaptation actions encompasses taking a wide range of actions that can be classified as soft, green or grey and may range from simple solutions realisable in the immediate term to large scale longer-term transformational projects.

1. Soft adaptation actions involve alterations in behaviour, regulation or systems of management, such as land-use planning policy. These have the potential to be relatively flexible and inexpensive to progress and therefore a good place to begin your adaptation journey.

Examples:

- Review key financial levers such as procurement with consideration for how they demonstrate climate resilience.
- Planning Department training and review process in relation to climate vulnerabilities and projections.

2. Green adaptation actions are those that seek to use ecological properties to enhance the resilience of human and natural systems in the face of climate change.

Examples:

- Efforts to reinstate dune systems to act as buffers against coastal storm damage.
- Creation of green spaces and parks to counteract urban heat island effects.

3. Grey adaptation actions typically involve technical or engineering-oriented responses to climatic impacts.

Examples:

- Construction of sea walls or tidal barrages in response to a sea-level rise.
- Replacement of traditional sprinkler systems with drip-feed irrigation schemes in the face of water shortages.

How to Identify Actions

There is a large amount of information to be gathered from other plans and guidance documents, linked at the end of this document. Consider the timing of actions and what would be the best place to start given your unique circumstance. Be honest about what initial groundwork might need to happen in the first instance.

- Use the risk register to define priority areas for action, then look at the outcomes under each theme to see what actions might be missing. It is useful to first identify actions required to offset current impacts and then identify additional actions based on future scenarios.
- It is important to note that in this first plan, actions are likely to be centred on policies, procedures and plans that are already in place, with perhaps a few new flagship changes to address priority risks.
- Consider the priority for the duration of the plan, and define what needs to happen in the next few years in order to embed adaptation planning in decision-making across the organisation.

Ten Principles for Good Adaptation

The UK Climate Change Committee sets out ten principles for good adaptation.

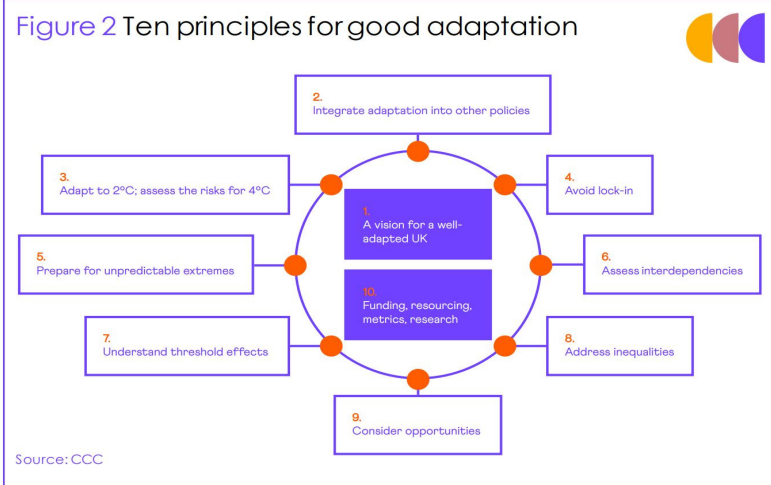


Fig 1. Ten Principles for Good Adaptation, CCC (2021) Independent Assessment of UK Climate Risk - Advice to Government⁹

These principles are taken from the Independent Assessment of UK Climate Risk report from the Climate Change Committee. The CCRA3 was supported by over 450 experts, and identifies 61 risks and opportunities for Northern Ireland; 31 of which now require more action and an additional 19 which urgently require further investigation. The Independent Climate Change Risk Assessment includes the [Technical Report](#), [Sector Briefings](#) and a [National Summary for Northern Ireland](#). Access the reports - www.ukclimaterisk.org

The CCC identified eight risk areas that require the most urgent attention in the next two years (see Fig 2 below) - with the caveat that flooding has not been mentioned for the wider UK, as many adaptation measures have already been put in place, while other risks lag dangerously behind. For Northern Ireland there are still risks in relation to flooding where more action is urgently needed, in addition to the risks in the figure below.

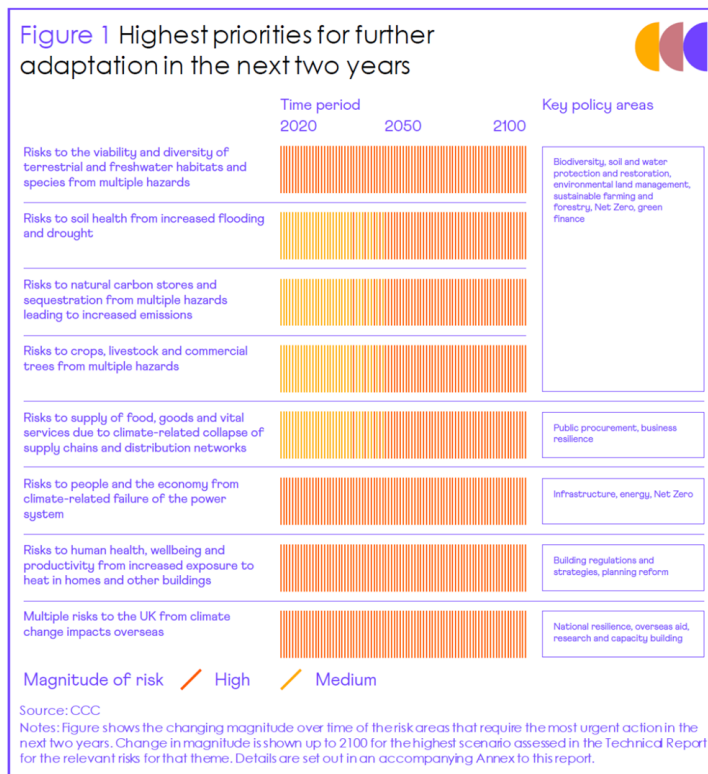


Fig 2. Highest priorities for further adaptation in the next two years CCC (2021) Independent Assessment of UK Climate Risk - Advice to Government³

The evidence gathered has also fed into a 2021 Progress Report to Parliament⁴ for the UK as a whole. This report provides specific recommendations for the UK which, while aimed at National Government, are also broadly relevant to Local Government.

Thresholds⁵

Defining actions based on thresholds may be too detailed for your first adaptation plan. However, it is good to be aware of, and you may choose to consider them for some priority areas.

Certainly, as plans develop over a number of years it may be a useful way of assessing where capacity might be exceeded as a way of deciding on action. These thresholds could be regulatory, reputational, physical or financial. Some examples could be:

- The cooling system for a data centre will fail when the external air temperature reaches 38°C. This temperature is the threshold; if this temperature is exceeded the air-conditioning will fail, and the servers will shut down.
- What is the point beyond which it is no longer worth repairing and upgrading X sea defence? (The factors are likely to be an interconnected range of costs and benefits: financial, social, environment)
- How much rainfall, over what period, can X flood defence withstand before being breached?

The pace and nature of climate change over the lifetimes of long decisions can be uncertain. The thresholds approach offers help in managing uncertainty by plotting pathways of possible actions along with the trigger point at which each would be initiated.

- What climate trends/shocks will push the system towards the identified thresholds?

- What is the likelihood of these climate events occurring, and what is the consequence to the organization?
- Is it inevitable that the threshold will be crossed?
- Are decisions being taken by the organization that will have long-term consequences, such as decisions on building design for example?
- How might climate change over this period?
- Is an incremental response adequate, or is a transformation required?

Additional Resource:

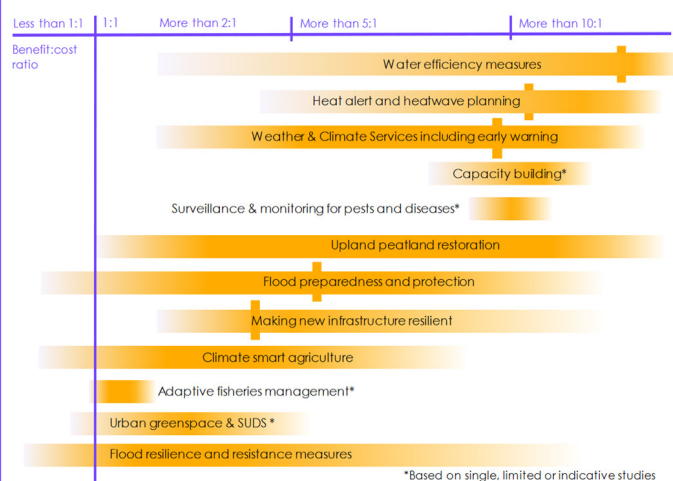
- [UKCIP Identifying adaptation options guidance document](#)

How to Prioritise Actions

Where there is a long list of potential actions, a basic action appraisal process may be beneficial. The appraisal process will help you to prioritise the actions by scoring them against criteria including potential to reduce climate risk, contribution to climate justice and level of organisational buy in, as well as cost and how they meet organisational objectives.

The UK Climate Change Risk Assessment Technical Report (2021) found that "Adaptation actions have high net benefits, and positive benefit to cost ratios, in many cases, even when considering direct benefits alone."³

Figure 3.6 Benefit-cost ratios of adaptation measures included in CCRA3



Source: Watkins, P. and Brown, K.A. (2021).

Notes: Figure shows the indicative benefit-to-cost ratios and ranges for a number of adaptation measures. It is based on the evidence review undertaken in the CCRA3 Valuation study, which was co-funded by the EU's Horizon 2020 RTD COACCH project (CO-designing the Assessment of Climate Change costs). Vertical bars show where an average BCR is available, either from multiple studies or reviews. It is stressed that BCRs of adaptation measures are highly site- and context-specific and there is future uncertainty about the scale of climate change; actual BCRs will depend on these factors.

Early action typically has much larger benefits than delaying and taking action after an impact has already occurred. Delaying action makes it much harder to reduce climate risks and may make large future costs inevitable.

There are three types of interventions that are highlighted as priorities for early action:

1. **No- and low-regret intervention** - There is a very strong economic case for early action in relation to no- and low-regret interventions, as these have immediate economic benefits from reducing current impacts. Examples include reducing water use or signing up to flood warnings.
2. **Climate-resilient design to avoid lock-in** - There is a strong economic justification to intervene early to include adaptation in near-term decisions that have long lifetimes and 'lock-in' risk. Economic analysis has found that building homes to be prepared for a future climate with higher temperatures, more flooding and more water stress is far cheaper than retrofitting poorly-adapted homes later. Similarly, previous assessments of adaptation in land use show much larger net benefits when action is anticipatory, i.e. taken in advance of a climate change impact occurring. An example is planting trees that will thrive in the future climate, rather than managing a poorly chosen species mix retrospectively.
3. **Early adaptive management** - For decisions that have long lead times, or where there are large future risks, there is a strong economic case for fast-tracking early adaptive management actions, because of the value of information and opportunity for learning these provide. An example includes flood management planning for London through the Thames Estuary 2100 programme.

Example Adaptation Plans

[Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020](#)

[University of Glasgow Climate Change Adaptation Plan 2018-2028](#)

[Mayo County Council Climate Adaptation Strategy](#)

References

¹Section quoted from: <https://www.adaptationscotland.org.uk/how-adapt/your-sector/public-sector/framework/planning-implementation/intermediate#PI2B>

²Section amended based on: <https://www.dccae.gov.ie/en-ie/climate-action/publications/Documents/14/LA%20Adaptation%20Guidelines.pdf>

³Information for this section taken from: <https://www.theccc.org.uk/wp-content/uploads/2021/07/Independent-Assessment-of-UK-Climate-Risk-Advice-to-Govt-for-CCRA3-CCC.pdf>

⁴CCC 2021 Progress Report to Parliament: <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/>

⁵Section based on the information in: <https://www.klimatilpasning.dk/media/1644984/ds-en-iso-14090-2019.pdf>