

Regional Climate Change Adaptation Strategy Guidance Note 6

Identifying and prioritising actions

Purpose

Identifying and prioritising adaptation actions is at the core of adaptation planning. The purpose of this guidance note therefore is to suggest some ways of thinking about and identifying potential adaptation actions that can then be prioritised.

While there is no one 'right' way to identify adaptation actions, there are number of useful steps that can be worked through to help guide their identification and prioritisation. This guidance note therefore provides some 'food for thought' about how to approach identification and prioritisation of adaptation options at various stages through the planning process.

Overall, the regional climate change adaptation strategy should promote an ongoing process to initiate, enable, support and scale-up adaptation actions across the region. It should also identify issues that might be more productively addressed at a local or state-wide scale – these may already exist or may develop through more localised, targeted actions with a region. Therefore, when it comes to identifying and prioritising actions for a regional climate change adaptation strategy, it is important to have a diversity of actions that can stimulate adaptation in multiple ways and on multiple scales e.g. from infrastructure solutions, institutional or policy change to measures, actions to enhance learning or connect different stakeholders. They may be designed to change parts of the system towards a desired future or to maintain things as they are.

Overall, the regional climate change adaptation strategy should promote an ongoing process to initiate, enable, support and scale-up adaptation actions across the region

Important Considerations

It is crucial that the preceding stages of planning are consolidated and analysed to identify emerging issues, synergies, key threats and opportunities. Additional analyses may be required to identify drivers/root causes (including structural and institutional) of identified issues, trends, threats, and opportunities.

The analysis can then be used to identify key priorities and actions. Identified actions should then be tested against future scenarios and prioritised. Adaptation actions are also those actions that might create the 'enabling conditions' for subsequent adaptation actions. Stakeholder consultation and deliberative democracy activities are two obvious examples of such conditions.

Suggested Methods

Five broad planning activities are described here. While regions may already have a planning and prioritisation process they would prefer to use, many of the considerations described here will be useful in that context also:

- 1 Build on stakeholder identified priorities and actions to brainstorm further possible actions.
- 2 Compare possibilities with existing plans.
- 3 Explore and refine actions – including testing against future scenarios.
- 4 Identify enabling conditions.
- 5 Prioritise adaptation actions.

This guidance note describes these steps, aiming to help support the identification and prioritisation of adaptation actions.



① Build on stakeholder priorities and actions

– brainstorm potential further actions

The first step in this process is to bring together the adaptation actions and priorities identified through the stakeholder engagement process. These will form the springboard for adaptation planning.

Using the stakeholder identified actions and priorities, the next step in developing adaptation actions is the simple act of brainstorming. There are a number of creative techniques through which such activity might occur, and the idea of starting with brainstorming is to try to think beyond 'current constraints' (e.g. avoid thinking about what's currently feasible, affordable, 'our area of responsibility'), current ways of thinking about issues, and really draw upon people's hopes for the future.

This creativity is essential to consider how strategies and plans can address the drivers or root causes (rather than symptoms) of vulnerabilities, risks, and possibilities. It is all about opening up possibilities, recognising that not all the ideas and options considered will be included in the regional climate change adaptation strategy.

Work done in the preceding steps is fundamental to guiding 'what' is being adapted 'to what'. It will be most helpful therefore, to ensure those participating in this action identification and prioritisation process are very familiar with that preceding work. Stakeholders that have already been involved in the regional climate change adaptation strategy process will understand and know their area of responsibility and interest quite well.

Drawing upon their expertise, knowledges, experience and ideas, will help draw extend the rich list of possibilities. Using the knowledge that has emerged from the preceding steps, there should be a level of confidence in the region's priority issues. Adaptation action identification should be targeted at these (at least initially).

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While there are multitude of techniques and methods for brainstorming, the following could be useful in developing an initial large suite of potential actions:

- Actions that could reduce or remove vulnerability by reducing exposure, reduce sensitivity, and/or increase adaptive capacities.
 - Actions that target root causes or drivers of an issue or vulnerability will be far more effective than those that simply target exposure. For example, changing how decisions are made about allocation of irrigation water will have more impact than changing the specific amount of irrigation water allocated. Or, addressing land use planning decisions that allow homes to be built in natural hazard prone areas is more effective than 'community engagement programs'.
- Actions to maintain things we care about.
- Actions to shift towards a tipping point or back from that to enable a transition towards a transformed situation.
- Things we might seek to transform/change significantly.
- What actions might create change at multiple scales? Dynamics at multiple scales might be influenced through coordinated and sequenced actions, or through actions that propagate and spread through the system – this is the same as connecting small wins.
- What actions might maintain or increase adaptive capacities and capabilities?
- Actions that are robust across multiple plausible futures and flexible (see next page).

There are many ways to think about ‘types’ of adaptation actions. This list is just one that might help stimulate ideas.

On ground works

For example planting for habitat connectivity, fencing for protection of particular areas, engineering works such as levees and other hydrological works, and community development activities.

Incentives

Instruments as covenants and acquisitions, and market-based instruments including tradeable permits or quotas, insurance arrangements and offsetting are examples.

Policy

Working with local, state and/or federal governments in policy development or review or advocating or lobbying for changes to policy including legislation and regulation.

Governance arrangements

Reforming the way decisions are made within the region or organisations or with others, including improving processes and systems for decision-making, transparency, inclusion, accountability, and other aspects of governance.

Research and learning

Investment in research or learning to better understand issues, represent problems or develop new innovative solutions to emerging policy challenges and opportunities.

Information and communications

Dissemination of targeted or large-scale information or communication campaigns. Communication efforts can be particularly effective when they are strategically embedded in broader engagement activities.

Advocacy/Influence

This would involve supporting other organisations in their activities that contribute to the strategy’s objectives, such as supporting local governments in revising land use planning policies. It could also involve advocating for changes in policy, governance, incentives, etc. This may be particularly relevant where an adaptation action is seen as a high priority but it is (currently) outside the scope or purview of those developing the regional climate change adaptation strategy.

Monitoring

Monitoring is a crucial component in all adaptation implementation.

Adaptive capacity building

This includes development of capacities within the social system: for example, through community engagement, education and extension. Actions could also include Research and Development for targeted and improved understanding of systems, Monitoring and Evaluation, and building agreement amongst stakeholder groups for particular actions and/or research. Actions could also include those that support or build the adaptive capacities of the natural world and non-human entities.

Discussion and deliberative processes

This relates to negotiating judgements about trade-offs, or negotiating between choices. These processes will be important to the entire regional climate change adaptation strategy process. For example, communities need to be thoroughly involved in both the defining of their own ‘vulnerabilities’ and the design of adaptation policies. However, different people or groups may want different actions and these may be in tension. This will require negotiation, participatory democracy processes.

Bear loss or share loss

Spreading the risk of loss among a wider population, spreading the loss of something across wider groups, e.g. there will be parts of the coast where losses cannot be avoided. Loss or reduction of land available for development in those areas to allow for that loss is a form of loss sharing. Identifying places where ‘nothing can be done’ is a form of bearing loss.

Take up opportunities

New activities, practices, businesses, or even ecosystems may result from climate change impacts or responses, e.g. UKCIP suggests that new opportunities may also be exploited by moving activities to a new location to take advantage of changed climatic conditions. <https://www.ukcip.org.uk/>

There are many ways to think about ‘types’ of adaptation actions





② Compare proposed/drafted actions with existing plans and actions

After identifying a suite of potential actions, it will be useful and efficient to examine what may already be happening or planned in other relevant strategies or plans (e.g. plans of Catchment Management Authorities, local governments, Water Authorities, Traditional Owner and other Aboriginal groups, non-government organisations, emergency services, community and health services, etc).

This analysis will help identify actions in other plans and strategies that the regional climate change adaptation strategy may want to explicitly state support for, alongside areas for discussion and further exploration with stakeholders. If the organisations have been part of the planning process, this might also help them identify the kinds of further support or guidance they might want in evolving their plans to suit climate change adaptation planning criteria.

In comparing the proposed actions with existing plans, the planning process can identify those actions the regional climate change adaptation strategy would want to support or extend, those actions the committee may wish to discuss with the 'owner', and actions that the strategy had not considered.

If the organisations have been part of the planning process, this might also help them identify the kinds of further support or guidance they might want in evolving their plans to suit climate change adaptation planning criteria

3 Explore and refine potential actions

The next stage is to 'filter' the large array of brainstormed ideas and those actions identified from existing plans. One way of doing this is to ask the following questions:

- Is this action potentially maladaptive?
 - Is it equitable? Whose interests does it serve? Who benefits from it? Have the those impacted by the action led or had an appropriate say in its development?
 - Does it enable or undermine social, cultural, or ecological sustainability?
 - Does it support or undermine efforts to reduce greenhouse gas emissions?
 - Does it undermine or support capacities to cope with future changes, unexpected events and shocks?
 - Who or what could be affected by this action?
 - Is there a risk that the action increases the vulnerability of any groups?
 - Is there a risk that the action will shift the problem to another social group, geographical area or into the future (simply delaying the implications)?
- Is there too much uncertainty about the action to implement it now?
- Is more work required to clarify unknowns?
- Is this an action that can be delayed to wait and see what occurs?
 - > If decision deferral relates to unwillingness to take an unpopular decision or face uncomfortable truths, this could exacerbate risks.
 - > What steps can be taken to actively fill the knowledge gap that inhibits action, and to monitor external conditions that would force a decision?
 - > Could it be a small-scale, low-risk experiment?
- What conditions are needed to enable this action? Are there a suite of other actions that are required before this action can be implemented?

Where exploration of an action identifies issues such as inequity, potential maladaptation, inflexibility, etc, the action should either be redesigned to address those issues, or potentially excluded.

- How might this action interact with other drivers, stressors or issues? e.g. growing population, increasing urbanisation, etc?
- Is this action robust and/or flexible?
 - If it will meet the above under multiple possible futures it is likely robust. (Here earlier developed scenarios can be used. See Guidance Note 5).
 - At what point or situation (under different scenarios) might the action no longer be able to meet its objectives? (Is there a threshold?)
 - What alternatives would be available at that point/situation, or does it lock us into a particular path? If the action does not leave other options open, it is not flexible and risks future maladaptation.
 - How will we know when to start implementing this action? And what does that tell us about when we need to make the decision to act? (See next page).

The next stage is to 'filter' the large array of brainstormed ideas and those actions identified from existing plans

4 Identify actions that provide enabling conditions

Because adaptation occurs in socio-ecological-political systems that are dynamic and continuously changing, it can be helpful to think about it as a process of continuous transformative change².

This is the idea that adaptation can be an evolving process involving small changes and learning that can be built on or connected to support larger changes or movements towards goals and objectives. This means adaptation planning needs to be as concerned with creating enabling conditions for adaptation, as it is with direct actions. Therefore, the regional climate change adaptation strategy process should also consider actions that address the following:

Setting conditions to enable and further encourage continuous adjustments that result in small wins: in-depth change at a small scope

Small wins are not necessarily quick wins, where people take fast and easy steps to solve simple issues (although these may also be in the regional climate change adaptation strategy). Rather, they target root causes or drivers and engage with worldviews but are done on small scales.

New knowledge, insights or even conversations can be transformative in one particular community or location. Because adaptation involves complexity and uncertainty, using a strategy of multiple small-scale but in-depth experiments or trials allow opportunities for learning and emergence. In this way, local or regional adaptation actions can be supported to create fertile ground to foster change, to nurture small but strategically important changes or for maintaining valued local attributes. This is also a good opportunity to identify actions that have the 'x-factor' in terms of creating change. For example, supporting an enthusiastic community, a passionate and engaged local leader, investing in creative innovative projects, and giving a diverse range of groups – such as youth – a chance to lead.

Amplify small changes

Increase the chance that small wins will accumulate into change on a larger scale. Due to the interconnected nature of regions, small changes at one place may force or enable changes at another place or on a broader scale. This means there is value in 'amplifying' small-scale adaptation actions, such as by:

- Connecting projects, pilots, experiments across the region or regions.
- Connecting developments at a regional, national or global level, and between regional experiments, or between various adaptation practices in different policy domains (e.g. water and biodiversity, mental health and conservation).
- Connecting people across the region or regions to stimulate learning.
- Translating e.g. between different communities, sectors or disciplines.
- Re-framing, building new perspectives.
- Story-telling, building narratives, sharing stories of adaptation.
- Integrating new practices or ways of thinking into existing institutions.
- Scaling-up innovative adaptations and preventing them from fading away¹. Integrating them into the activities and resources of existing organisations, without losing its transformational strengths is the challenge.

Unblocking 'stuck' systems.

If persistent inertia forms a blockage to processes of continuous change, intentional interventions are needed to unblock stagnations to restore learning processes and revitalise processes of continuous change³, e.g. Invite new stakeholders into a process, or try new rules or ways of working; use others' ways of working.

Because adaptation involves complexity and uncertainty, using a strategy of multiple small-scale but in-depth experiments or trials allow opportunities for learning and emergence

5 Prioritise actions

Actions now need to be prioritised and refined into a strategy. Those responsible for the regional climate change adaptation strategy should identify a prioritisation process that is regionally specific.

The aim of this step is to take a potentially large number of proposed actions and work down to a manageable number of actions that will be feasible. Feasibility can depend on a wide variety of factors including (but not limited to): cost, acceptability or legitimacy from stakeholders, management support/capacity for development implementation, technical feasibility, knowledge base or environmental impact. Other criteria to consider are the likely effectiveness and also which actions are within the control and responsibility of the region and which could or should be elevated to other levels of government. There may be other criteria that the region identifies as important to their own prioritisation process and a variety of methods that can be used for this step, for example multi-criteria analysis.

There is also a risk within the prioritisation process that actions considered experimental or not 'business-as-usual' will be lost because they do not fit with usual management criteria. Yet these may be what is needed to effectively shift towards sustainable and equitable adaptation. Therefore, when developing a list of criteria

for filtering, attributes such as innovation, creativity, and potential for learning could also be considered. The following are presented to help prioritisation thinking and approaches.

Implementation ease and possible speed of change

Actions that target root causes or drivers and engage with paradigms can often enable greater shifts towards sustainability, adaptation, and equity, than those that seek to address symptoms such as exposures to hazards. Table 1 below depicts a simplified way of appreciating issues of implementation ease and possible speed of change (adapted from the Stockholm Resilience Centre's Wayfinder).

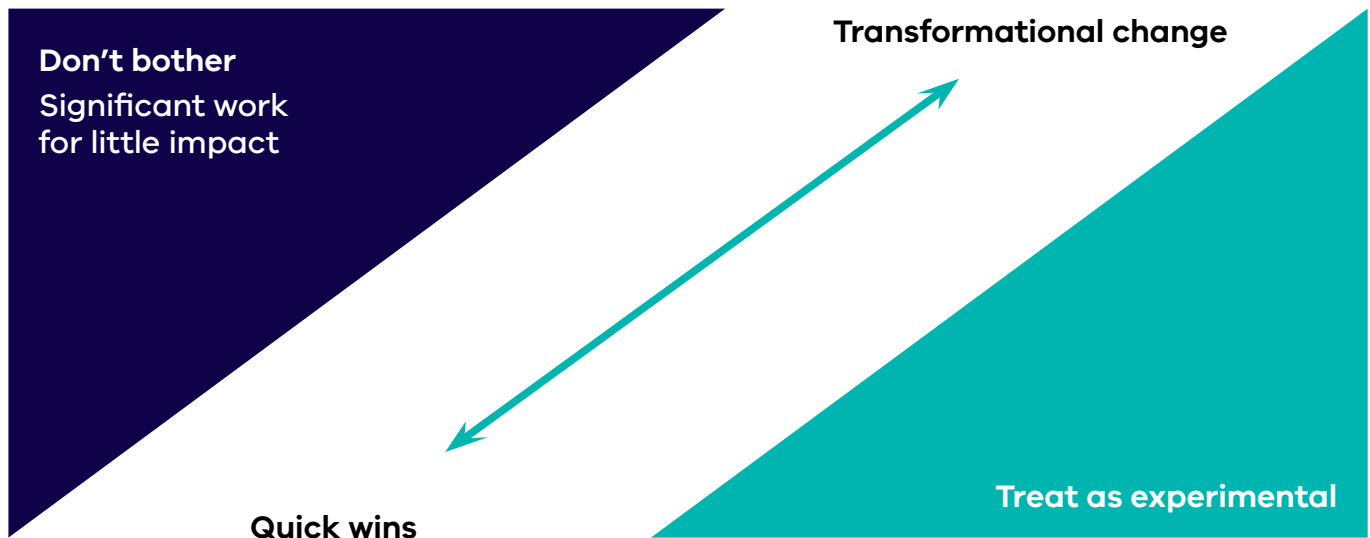
Yet, while actions targeted at root causes or engage with paradigms can be difficult to initiate on large scales, small scale actions may be more supportive to begin with. For example, research, community engagement, and deliberative democracy processes. This is where identification of 'enabling conditions' as described above will likely be most helpful, such that the regional climate change adaptation strategy is based on a suite of sequenced and coordinated actions over time.

Table 1. Ease of implementation and speed of change

Difficult	Low impact – difficult/slow	Moderate impact – difficult/slow	High impact – difficult/slow	Change in paradigms	Slow
	Low impact – hard/moderately slow	Moderate impact – hard/moderately slow	Culture, power, unwritten rules, ways of working	Significant impact – hard/moderately slow	
Implementation Ease	Low impact – medium/ moderately quick	Relationships & Interactions (Governance)	High impact – medium/ moderately quick	Significant impact – medium/ moderately quick	Speed of change
	Policies, practices, and resource flows	Moderate impact – easy/quick	High impact – easy/quick	Significant impact – easy/quick	
Easy					Quick
	Low	Impact/System Change		Significant	

Adapted from the Stockholm Resilience Centre's Wayfinder

From this perspective, it could be useful to 'classify' actions in one of the three groups indicated below:



From here, regions might filter out actions/priorities in top left blue triangle as too difficult for too little impact. Then consideration can be given to whether actions that fit in bottom right green triangle need to be:

- reassessed or recategorised
- filtered out as unrealistic, speculative or too high risk
- considered as potential experimental actions.

After filtering projects in both triangles, it is expected most regions will have a range of priorities and actions across the spectrum from easy and low impact initiatives (quick wins) to slow and difficult initiatives but with significant impact/system change (transformational change).

Further analysis is then needed to consider if there is a greater weighting of 'quick wins' (low-left quadrant) then teams should consider if their analysis delved deep enough to consider systemic drivers of issues or challenges. Equally, if there is a greater weighting on 'transformational change' (the upper-right quadrant) then teams may be missing some important easy to implement actions that can help lay the foundations for further adaptation action.

In undertaking a prioritisation process, it is also important to consider when decisions need to be taken

Decision timeframes

In undertaking a prioritisation process, it is also important to consider when decisions need to be taken. For example, what policies, management activities, ways of life, governance activities, etc might have to change or stop, and what might have to commence as a result of the future changes? This then becomes about what kinds of lead time is required to undertake the action, to get the outcome and how long might it take to make the decision to act, and what decisions might need to come before that? For example, the regional climate change adaptation strategy might identify a participatory democracy process over two years that will help inform when, how, or why a particular activity might stop or start in a location. Or, some research may be needed to better understand drivers of a vulnerability before any actions might be planned. These are all adaptation enabling. Nonetheless, the strategy should outline the triggers or indicators of when it should be implemented – such as a biophysical or economic trigger, or another key event that suggests the action should be reconsidered.

Overall, the regional climate change adaptation strategy should incorporate flexibility and robustness by combining low-regret, more immediate or short-term actions with longer-term, sequenced options. Enabling an adaptive strategy will require anticipatory monitoring of indicators or tipping points to ensure adaptive actions are taken when necessary, and that the strategy is updated. Therefore, an action with a future trigger for implementation, is likely to have a medium to low priority because there may be no need for immediate implementation. However, monitoring of the indicators would have a higher priority.

Basic priority criteria

Finally, priority could be considered for those actions that are:

No regrets

Actions that deliver benefits that exceed their social, cultural, economic, and ecological costs irrespective of future changes, e.g. building social and ecological adaptive capacities; avoiding building in high bushfire risk areas.

Low-regrets

Associated costs are relatively low and benefits (current and future) of the action are likely to be relatively large.

Win-Win

Actions that have the desired result in terms of adaptation alongside other social, cultural, or ecological benefits, e.g. actions that have no GHG emissions and that regenerate cultural practices.

Flexible

Actions that can be reversed or changed as their impact (or other impacts) evolve.

Urgent

Actions that address an urgent and pressing risk that are also not maladaptive (see above).

Clearly, it will also be easier to implement those actions that are currently within the adaptation planning team or planning group's sphere of control or responsibility than those within its sphere of influence. However, the group will need to consider if they want to work or advocate to have particular actions within their sphere of control or influence, and those they might want to share or 'pass onto' a more appropriate body. Creating or advocating for new or adapted governance arrangements can also be an adaptive response.

Further useful detail regarding types of adaptation options can be found in the UKCIP guide: https://www.ukcip.org.uk/wp-content/PDFs/ID_Adapt_options.pdf



Identify roles and responsibilities

Once actions have been identified, agreed, prioritised, and grouped, monitoring and evaluation criteria and measures identified, then roles and responsibilities will need to be attributed or negotiated. Something as simple as a RACI (Responsible, Accountable, Consulted, Informed) matrix may be useful here.



Bringing it all together: reflecting and documenting

Overall the strategies should promote an ongoing process to initiate, enable, support and scale-up adaptation actions across the region. The regional climate change adaptation strategy should comprise the topics and issues identified throughout the planning process covered in all 6 guidance notes in this series. The regional climate change adaptation strategy should also identify issues that might be more productively addressed at a local or state-wide scale – these may already exist or may develop through more localised, targeted actions with a region.

Therefore, when it comes to identifying and prioritising actions for a regional climate change adaptation strategy, it is important to have a diversity of actions that can stimulate adaptation in multiple ways and on multiple scales e.g. from infrastructure solutions, institutional or policy change to measures, actions to enhance learning or connect different stakeholders. It should use both anticipatory and retrospective monitoring, evaluation, and learning to improve future actions and strategies.

Once again, after the above has been worked through (and this will likely be an iterative process), the regional adaptation planning group should

undertake and document their reflections, using the questions outlined in Guidance Note 2. They might also wish to explore other questions and ideas. Finally, the group should have documented the results of the above processes, noting that they may change as the process evolves.

Documentation should include as a minimum:

- the actions identified and the processes used to identify them,
- priorities, including the proposed timing of actions (short, medium and long-term), and trigger points for decisions and actions (e.g. to change a flexible action); and
- initial agreed or 'yet to be negotiated' roles and responsibilities.

It would also be incredibly valuable for the group to consider the monitoring, evaluation, reporting and improvement approach and what kind of data, information and knowledge they might document along their learning journey, including how useful or effective the use of different scenarios was in developing the regional climate change adaptation strategy.

1. Wiseman et al (2012) *Scenario Planning for Climate Adaptation Guidebook for Practitioners* http://www.vcccar.org.au/sites/default/files/publications/SPCA_GUIDEBOOK_FINAL_200711.pdf
2. Termeer et al (2017) Transformational change: governance interventions for climate change adaptation from a continuous change perspective, *Journal of Environmental Planning and Management*, 60:4,558-576,

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