In brief

Climate Adaptation Outlook: A Proposed National Adaptation Assessment Framework

Climate change impacts will undermine our wellbeing and prosperity unless we make good decisions to deal with them today. The World Economic Forum rates failure of climate change adaptation as one of the five highest impact global risks. Leading nations, businesses and communities are already taking serious steps to manage this growing risk because of the competitive advantages it offers.

Making good decisions in a changing climate

For Australia — one of the developed countries most vulnerable to climate change impacts — the stakes are high. Climate change impacts are a significant risk to our economy (billions of dollars worth of assets are exposed to sea level rise, flooding or bushfire; extreme weather can disrupt critical business operations and supply chains), to communities (health risks are serious, disadvantaged groups are highly vulnerable) and to the natural environment.

The benefits of good management of climate change are significant: social, environmental and economic damages will be lower, new opportunities can be fully exploited, and fresh thinking about climate risks will stimulate innovation.

It is therefore important that we know how well Australia is adapting to the impacts of climate change. The National Adaptation Assessment Framework allows governments, businesses and communities to assess national progress in climate change adaptation.



'Adaptation' means the steps governments, businesses, communities and individuals take to deal with risks from climate change impacts.

What would good adaptation look like in Australia?

The National Adaptation Assessment Framework will help governments, businesses and communities understand how well Australia is adapting to the impacts of climate change. It asks three questions:

- What drivers in society and the economy would promote good adaptation?
- What activities would we expect to see now if Australia is adapting well?
- What outcomes do we expect to see from good adaptation?





Adapting well means making smart decisions now and into the future. Many factors will help shape these decisions.



Risk allocation: Climate risks — from floods, droughts, bushfires, cyclones and heatwaves — are already serious and growing worse as the climate changes. Some are poorly managed. To improve management, risks should be well understood and clearly allocated to those best able to manage them, and beneficiaries should pay the costs.



Governance: Regulations such as building codes, land use planning frameworks and regulation of energy infrastructure should promote effective adaptation. Institutional arrangements should allow for cooperation across and between jurisdictions where it is needed to manage climate risks.



Markets: Markets can provide incentives to adapt through price signals and by promoting disclosure of climate risks. A flexible economy will allow resources to be efficiently reallocated following climate shocks or in response to more gradual change.



Social: Broad public acceptance that some things need to be done differently in a changing climate is necessary to support adaptation by business, the community and government. A high degree of trust and interconnection will make communities more resilient to climate change impacts.



Activities

Although it may make sense to postpone some adaptation activities, some should be happening now.



Dealing with current climate risk: Increasing resilience to bushfires, floods, heatwaves, cyclones, storms and droughts will be beneficial in today's climate and leave us better placed to manage the more extreme climate of the future.



No or low-regret actions: No or low-regret adaptation activities offer net benefits under most climate change scenarios. They might increase flexibility in the future, or have co-benefits unrelated to climate change impacts.



Decisions with long-term implications: Decisions such as the location of new suburbs, management of conservation estates and design of long-lived infrastructure may 'lock in' vulnerability to future climate change impacts. Even where there is no case for immediate changes, it is prudent to consider the implications of future climate change.



Building capacity: Australia will need information and skills to help governments, businesses and communities adapt. For example, information about how climate risks are likely to change, options for managing emerging risks and strategies for making decisions under climate uncertainty. Professionals such engineers, architects, planners and financial analysts will need new skills to make good decisions in a changing climate.



Outcomes

Adaptation is about continuing to improve wellbeing in a changing climate without allowing climate risks to reach unacceptable levels. Australia will be managing the impacts of climate change well if:



Australians are able to enjoy economic, social and environmental opportunities, and are flexible and resilient to climate change impacts, while the level of risk from climate change impacts is kept within limits acceptable to the community



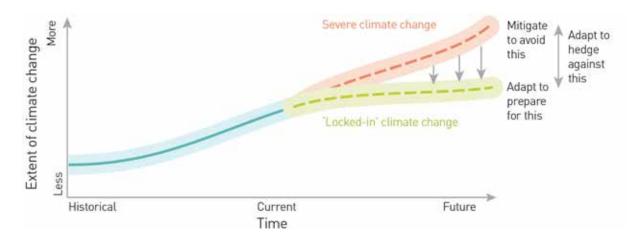
Management of risks from climate change impacts today does not compromise the capacity to manage risks from climate change impacts in the future



Disadvantaged groups have the resilience and capacity to manage risks they face from climate change impacts.

Adaptation and mitigation

Reducing greenhouse gas emissions ('mitigation') and managing the impacts of unavoidable climate change ('adaptation') are complementary strategies to deal with the challenge of climate change. The figure below shows the relationship between them.



Some global warming has already occurred and more is unavoidable. There is global agreement and concerted action to limit global average warming to 2 °C. However, this amount of climate change would still leave Australia with substantial climate risks to manage.

The magnitude of additional warming depends on how sensitive the global climate is to atmospheric greenhouse gas concentrations as well as on future emissions. So even with strong global mitigation, the future climate may be more challenging than we prefer. Adaption is therefore necessary both to deal with climate change already locked in and hedge against more severe climate change.

Next steps

The Australian Government Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education will consult with stakeholders about the proposed framework in the second half of 2013. A final framework will be published in early 2014, and an assessment of national progress will be prepared for late 2014.

Those wishing to provide comments on the proposed framework can email them to AdaptationOutlook@innovation.gov.au.