





# **Informing Adaptation Policy**

NCCARF-DCCEE-ANU Workshop 3-4 May 2012, Canberra

# **Report for Policy Makers**

The Informing Adaptation Policy Workshop was held at the ANU in Canberra on 3-4 May 2012. It was organised by the ANU on behalf of the co-sponsors (NCCARF, DCCEE and ANU). The key objective was to draw on actual climate adaptation experience, practice and research from over 50 participants representing a wide range of sectors and interests, in order to inform government climate change adaptation policy.

## **Key Findings**

- The level of maturity of adaptation response in Australia is low overall and patchy
- Appreciation of the climate risks has been extending into broader social and economic impacts,
  with some increasing private sector concerns; whilst at the local government level the urgency
  to respond to climate impacted decisions is not assisted by the slow pace of reforms and lack of
  coordinated guidance at higher levels of government
- There is a need to shift from a tactical focus on individual adaptation decisions to a more strategic and transformational focus on many issues
- A more strategic climate change adaptation response can also provide important leverage on significant non-climate change drivers and issues
- Within government Commonwealth, state and territory agencies should be required to explicitly include and report on climate change adaptation in their own activities
- There are significant gaps in knowledge to support effective decisionmaking
- Across all levels of government and other sectors there is a clear need for more effective sharing of knowledge, experience and research findings
- A continuing level of funding for adaptation specific research is necessary, with some shifts to reflect progress and findings from current programs
- More overt, clearly communicated, consistent and coordinated
   Commonwealth adaptation policy leadership and intent is required
- There is a need to clarify roles and responsibilities at all levels of government based on legitimacy, competence and corresponding resource allocations
- Whilst some are aligned the workshop findings differ from the Productivity Commission Draft Report especially in the assessment of the extent of the challenges involved in responding to emerging climate risks, and the crucial leadership and coordinating role of government

#### **Background**

Many studies have indicated that climate change is a real and growing risk to communities' social, economic and environmental outcomes. Part of the context for the workshop was that the Commonwealth Government is undertaking further work to strengthen the policy base for adaptation by drawing on the evidence built over the past 5 years through its National Climate Change Adaptation Program. At the same time state, territory and local governments currently take a variety of approaches to adaptation and there are opportunities to learn from this. The workshop discussion also involved consideration of the Productivity Commission's Draft Report on 'Barriers to Effective Climate Change Adaptation' which was released a week before the workshop.

"There is now a real prospect of underestimating the extent of transformational change required"

Over 50 people attended representing a broad range of stakeholder interests including private and industry sector organisations, the community services sector, local councils and local government associations, state and territory governments, Commonwealth departments and agencies, regional organisations, consultants and researchers. Given the diversity of participation, there was a remarkable consensus on many of the priority adaptation issues going forward.

A workshop report was prepared by the ANU and validated by circulation of a draft for comment from all workshop participants. This resulting report for policy makers therefore summarises the conclusions of the workshop, but should not be taken to represent the views of any government in Australia, any Commonwealth agency, the NCCARF or the ANU.

#### **Workshop Conclusions**

A fragile baseline in adaptation capability: The workshop assessed that in some crucial respects the level of maturity of adaptation response in Australia is low overall and patchy, leading to significant exposure if left unaddressed. There was acknowledgement that the investment in adaptation over the last 5 years has supported a useful step forward. However it was concluded that we are neither nationally nor locally where we want to be on climate adaptation response and preparedness, especially given the potential future impacts, and even a concern that in some respects we are at risk of going backwards. Specific concerns raised included lack of leadership and clear goals nationally and regionally; inconsistency and fragmentation of policy, regulations, guidance and approaches; and

inadequate investment in consolidating and sharing adaptation knowledge and experience - this adding to the reality of limited and fragile response capability at all levels.

The appreciated risk is increasing and broadening:

The understanding of climate risks has been extending from the traditional hazard exposure, settlement and natural resource concerns to broader social and economic implications. Examples cited included the growing focus of institutional investors on climate risk to assets, with consequential implications for their investment strategy; and withdrawal of insurance cover in more exposed areas. At the local level councils are finding that the urgency to respond to day-to-day decisions and sometimes hostile community pressures is not matched by the slow pace of necessary reforms, new frameworks and initiatives from higher levels of government.

## Some shift to transformational thinking needed:

It was agreed that whilst initially it is natural to develop adaptation activities in response to present day risk and through incremental responses, there is now a real prospect of underestimating the extent of transformational change required to effectively address longer term adaptation (e.g. already signs and pressures in water resources; agriculture; land use and conservation planning; property rights; major infrastructure decisions; growing financial services, investor and insurance concerns; and the need to address change incentives and disincentives including taxation and relief arrangements). In some areas, addressing existing risks through incremental actions may be more immediately achievable, but nevertheless result in mal-adaption in the longer term (either not addressing future problems early enough or actually increasing exposure or costs).

Uncertainty is a reason for caution but not for inaction. Whilst it is important that significant response decisions consider the potential for phasing subject to thresholds and triggers (i.e. initial incremental steps can be part of a broader transformational strategy), such approaches need intentional evaluation and planning and represent significant decisions in their own right. Commitments will often have to be made notwithstanding an irreducible level of uncertainty in future climate projections. Policy makers need to plan for a wider range of future climate risks, including 'surprise' events and step changes well outside the range of past experience. Overall there is a need to shift from a tactical to a strategic decision focus in many adaptation contexts (e.g. NRM, agriculture and rural communities, coastal settlements, cities). Many of these issues require national discussion to help guide and shape appropriate locally specific solutions.



Climate adaptation an opportunity to address other change drivers: Climate change adaptation also has the interesting (and potentially valuable) characteristic that it can bring forward consideration of other underappreciated issues with which it has significant interdependencies. Tackling adaptation positively can provide additional incentives and opportunities to address those parallel issues (e.g. fosters crossboundary collaboration, partnerships and dialogue, and potential interventions with co-benefits). In this way climate adaptation can provide a lead into better management of a range of non-climate change drivers and issues. Investment in programs to support other policy goals (for example more liveable and efficient urban areas) can also address longer-term climate adaptation needs.

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Significantly improving adaptation decision-making capabilities and coverage: Improved guidance and capability is especially needed to support complex decision-making in response to identified risks, under significant uncertainty and for longer time-scales, including how to factor in the values, benefits and costs to multiple stakeholders (communities, individuals and businesses). There is a very significant information and capability gap in this area, and at all levels, including regional and local. To the extent possible adaptation perspectives should be embedded in 'natural' decisionmaking processes. As has happened in some other countries, Commonwealth and state agencies should be required to explicitly include and report on climate change adaptation responses in their own major infrastructure investment and services decisions, asset management and operations, and in relevant policies, strategies and key cabinet submissions.

More consistent data, information and risk assessments: There are also significant gaps in the knowledge to support effective decision-making. Key areas include a nationally consistent set of climate change projections downscaled to the local level, and the data sets and methodologies to translate these to risk at regional and local scales (e.g. consistent hazard mapping across local and state boundaries). Clear guidance on confidence levels and how to use this information, would help complement local experience and knowledge. This should be complemented by a more systematic approach to national and regional risk and vulnerability assessment along the lines of recent UK Climate Change Risk Assessment (CCRA).

Consistent data and approaches may also help address local government liability concerns. There is a need for better capture of externalities to support adaptation decision-making such as social, environmental and natural resource values, and community preferences and risk thresholds. This type of social and behavioural research may now be a more significant short term priority for achieving effective adaptation outcomes than research on long-term climate change science.

Improved knowledge sharing and capability **development:** At every level and across all sectors there is a clear need for more effective sharing of knowledge, experience and research findings, emerging best practices, case studies, methodologies and support tools. As well as developing national and state initiatives to address this gap there would be high potential value from funding 'one-stop shops' such as regional knowledge brokers and supporting networks to assist in translation of knowledge to practical application. This could be similar to or even incorporated into some current Regional Development Authority/Regional Organisation of Council/Natural Resource Management models. Parallel support needs are emerging in the private sector (e.g. a standardised asset climate risk assessment framework and tool for investors; building risk rating tools for insurance).

Further knowledge development and linking research to policy and practice: A continuing level of adaptation specific research funding was supported albeit with some shifts in focus to reflect progress and findings from current programs. Specifically it was seen as valuable to build on the NCCARF National Adaptation Research Plans/National Adaptation Research Network processes but with a broader range of stakeholders and end-users; and to build on the initial tranche of adaptation research of the last 3-4 years with a more formal research stocktake and synthesis from users' perspective, along with actual usage assessment and an update of key knowledge gaps. The opportunity to learn from other research models was identified (for example the rural R&D corporations or CRCs) with respect to stakeholder and industry engagement and co-investment at national and regional levels. There is a need for an ongoing national host for facilitating adaptation research agendas and priorities, and distillation of insights. The reality is that it is still quite early in the life cycle of adaptation specific research in Australia.

Putting evidence-based policy into practice was seen as problematic unless account is taken of the social and political context of many adaptation issues, though several examples were cited where policy and practice have been significantly influenced by research. Evidence was seen as crucial but often most effectively



conveyed via case studies and personal accounts rather than the research analysis itself. It would be helpful to profile examples and case studies where research investment has made such a difference.

Clearer policy intent, framing and goals: There was a call for more overt, clearly communicated, consistent and coordinated Commonwealth adaptation policy leadership and intent. Adaptation policy itself needs to be flexible and adaptive and recognise the varying stages and maturity of policy development and implementation; and also to recognise that different sectors are at different stages (e.g. water, agriculture and emergency management systems are all further advanced than urban settlement planning).

The workshop addressed the challenge of there being many (often unclear) ways that adaptation is currently described ('narratives') and adaptation goals being expressed in diverse 'languages'. It was agreed that multiple perspectives or framings of adaptation are quite legitimate (e.g. dealing with current hazard management vs future uncertain risk/opportunity management vs resilience building vs responding to transformational change pressures) depending on the nature of the issue being addressed; and that therefore a comprehensive policy needs to encompass each of them within a holistic policy narrative. The main requirement is to be explicit about which is in focus at any one time.

It was noted that goal setting and monitoring needs to reflect both the 'goal of adaptation' (carrying out the adaptation process – such as effective decision making) and 'adaptation goals' (achieving the desired outcomes – such as maintaining or enhancing community wellbeing or equity). There is also a need to be clear how adaptation goals reflect various stakeholder perspectives, often requiring negotiation between interests (e.g. community expectations vs individual rights and choice; existing asset owners vs new investors; the needs of the disadvantaged vs those more able to cope).

Building positive narratives and engagement: For effective engagement with the community adaptation needs a more consistent and positive solutions-based narrative stressing potential adaptation dividends rather than an adaptation deficit. It can also emphasise that adaptation strategies are complementary (but not an alternative) to climate mitigation, as some level of climate change impact is now inevitable and we must adapt; but that if actively addressed change could be more manageable and so not to be feared. Promulgating examples of successful adaptation would be helpful. A set of linked and compelling narratives need to be targeted to different sectors and audiences down to the household/ enterprise level.

More consistent and supportive policy, regulations and guidance: There is need for greater policy and regulatory consistency across and within jurisdictions to assist private sector investors as well as local and other levels of government. The goal should be consistency of assumptions and approaches, not of solutions. Investors struggle with inconsistent planning standards and approaches in different locations and also seek consistent (not necessarily identical) assumptions on climate and physical impacts for risk assessment. Similarly councils aiming to adapt effectively are better placed to make tough and potentially unpopular decisions if supported by consistently agreed (and in some cases possibly mandated) assumptions and approaches.

"Collaboration horizontally and vertically across all levels of government and with other stakeholders (industry, community) is critical, supported by mutual responsibilities and networking."

A priority for more relevant, helpful and consistent parameters is the area of land use planning and new buildings where there is a risk of a growing gap between current and climate change adjusted standards, codes and regulations. Policy initiatives should also be considered in areas such as more flexible property rights, risk disclosure and assessment, and dealing with existing assets stock. Whilst formally a state and territory issue, leadership from the Commonwealth is needed to drive nationally consistent approaches. The work of the Major Cities Unit in developing National Urban Policy, and COAG's criteria (which include climate change) for capital city strategic planning may provide additional levers.

More effective governance with clearer roles and responsibilities: There is a need to clarify adaptation-related roles and responsibilities at all levels of government based on the principles of legitimacy and competence and with appropriate allocation of resources. Collaboration horizontally and vertically across all levels of government and with other stakeholders (industry, community) is critical. COAG should be a driver of this process but is seen as problematic in terms of the speed and cohesion of response. There is also a need to recognise the appropriate scale (spatial, temporal) in decision-making. In this respect climate change is increasing the focus on coordinated regional approaches (smaller than states, bigger than individual councils) and there are some real success stories emerging in this respect.

The **Commonwealth,** with the states/territories, should have a significant leadership role. Whilst mainstreaming



responses into relevant policy and program agencies is highly desirable there is also a need for a distinct adaptation policy agenda and an agency with overall adaptation responsibility at federal (and state levels) in order to:

- ensure and promote consistent and compelling whole-of-government narrative and policy development; identify and help manage significant cross-sector interdependencies and avoid related duplications/mal-adaptations; help harmonise integrated regulatory and standards development; and support related COAG processes
- develop and drive a more coherent and systematic approach to adaptation related data and information standardisation, availability and use; including provision of core data and information sets (e.g. historical and projected climate information, nationally agreed scenarios, flood and other hazard risk data); guidance on how to use this information effectively; and development of a more systematic and consistent national climate change risk assessment
- facilitate use of the above by government agencies in required adaptation planning for publicly owned and managed assets, resources and services – such public assets include built and natural assets, and services include human and community services as well as infrastructure based services
- coordinate the overall knowledge development/ research priorities process; the consolidation, synthesis and rapid dissemination of existing and new information and knowledge; and the enabling of climate and adaptation knowledge broker roles at other (e.g. regional) levels
- drive a more intentional monitoring and evaluation (M&E) review/indicators approach linked to key goals across and between all levels of government
- identify and facilitate with other stakeholders, where top-down strategic and program directions and support are necessary to complement more traditional bottom-up approaches, especially where potential transformational implications are emerging; this would include some level of seed funding to facilitate change, incorporating learning from various project funding schemes delivered over the last 4 years

#### Regional level

There is a growing focus on drive and coordination at this level and a number of good regional collaboration stories involving Regional Development Authorities (RDAs)/Regional Organisations of Councils and Natural Resource Management bodies (some South Australian examples were discussed), considered most effective when all three levels of government are involved. RDAs are useful at regional levels as they can bring a whole-of-government and cross-sector perspective. As mentioned earlier there is high potential for knowledge brokers and partnerships to operate at this level.

#### Local government level:

Councils have the responsibility to implement practical adaptation responses and have often had to develop local policy in lieu of clearer policy and guidance from other levels of government. There is a risk of councils not being able to reject maladaptive development in the absence of stronger and more consistent planning legislation, and clearer definition of adaptation-related roles and responsibilities. There is a growing capacity and resource mismatch at local levels and it was noted that external seed funding has been crucial to the more advanced adaptation initiatives.

#### Private and community sectors:

It was noted that the private sector and community service sector should be directly consulted in future adaptation policy and program development. Their focus on climate risk is increasing and it is often these sectors that have to deal with the implications of policy change, or in some cases the lack of effective or coordinated policy. Social and equity issues need to be considered in any comprehensive adaptation policy, as well as ways to harness private sector engagement.

#### Developing a balanced approach to mainstreaming:

Mainstreaming of climate change adaptation across and within the various agencies of government is a highly desirable approach but with some care needed to differentiate the approach to and timing of mainstreaming according to the 'maturity' of individual sector adaptation efforts (e.g. water and agriculture sector experience in dealing with climate issues is far more extensive than for urban planning). There are risks in mainstreaming policy development and implementation too early or in situations where there are significant interdependencies or a shift from incremental to transformative approaches may be needed.



#### Relationship to Productivity Commission Draft Report issued April 2012

The Productivity Commission's Draft Report on 'Barriers to Effective Climate Change Adaptation' was published a week before the workshop and the Presiding Commissioner, Wendy Craik, gave a summary presentation at the workshop. It was not the purpose of the workshop to review the Draft Report and indeed it did not do this explicitly – rather it was seen as a significant input. However the workshop participants naturally discussed aspects of the Draft Report and expressed some views.

Some themes that emerged from the workshop were strongly aligned with those in the Draft Report, including:

- That it is natural and appropriate to start climate change adaptation by addressing current day climate pressures such as natural hazards and emergency management
- The significance of capacity issues at local government level
- The need to progress more consistent planning regimes and building regulations that address both current and future climate risks
- The need to be clearer about respective roles and responsibilities in climate change adaptation

However there were also significant differences of view or weighting on some important points. For example the workshop participants gave much greater weight to:

- The extent to which key markets are currently not well informed on relevant risks and issues
- Recognition that future climate conditions are likely to be outside the range of past experience and that there is a need to plan now for transformational approaches in some areas
- The need to build and support the (currently weak) capability to carry out more complex and uncertain future risk assessment and adaptation decision—making processes, using more consistent frameworks, data and assumptions
- The need for more consolidated investment in (currently highly fragmented) knowledge and experience synthesis and sharing, and in a level of ongoing adaptation focussed research, in order to address significant knowledge gaps, and to build on (and not waste) the investment and initial progress of the last 3-4 years
- The need for the Commonwealth, with the states/territories, to take a significant leadership role, supported for the foreseeable future by the essential role of a coordinating Commonwealth agency. Whilst a mainstreaming approach within individual policy and program agencies is highly desirable, the need for a distinct adaptation policy agenda, and an agency with the capacity to coordinate adaptation roles and responsibilities at the federal level, were seen as crucial, along the lines summarised in the workshop conclusions, at least until management of key issues reaches a much greater level of maturity. By contrast the Productivity Commission Draft Report 'does not see any specific role for the DCCEE in climate change adaptation' and (apart from a role in support of COAG) does not set out any alternative coordinating role at the Commonwealth level.

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