

Environment & Planning Law Committee

Submission on Barriers to Effective Climate Change Adaptation

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*PRODUCTIVITY COMMISSION
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About Us

The NSW Young Lawyers Environment & Planning Law Committee (Committee) brings together a network of the state's young practitioners to discuss a shared interest in our environment. The Committee focuses on environmental and planning issues, raising awareness in the profession and the community about developments in legislation, case law and policy. We also concentrate on international environment and climate change laws and their impact within Australia.

Introduction

The Committee welcomes the opportunity to make a submission in response to the Productivity Commission's call for submissions in relation to barriers to effective climate change adaptation.

This submission will focus on:

- Environment and planning laws;
- Building codes;
- Infrastructure; and
- Insurance.

Environment and Planning Laws

We submit that the Commonwealth and State levels should provide overarching climate change adaptation leadership and guidance to local authorities. This is already being established, but greater and more timely involvement and cooperation is required. This is possible through intergovernmental cooperative agreements such as, for example, the Intergovernmental Agreement on Murray Darling Basin Reform.

We submit that the most appropriate climate change adaptation decision-making should occur at the local government level and supported by the State and Commonwealth..

Central repositories of information would allow local government to better understand the nature and extent climate change impacts upon their areas. If provided with high quality information, local government is nimble enough to amend development guidelines and local planning laws without delay and with the benefit of community input, which would create better quality decisions.

The principal barriers to local government implementation of climate change adaptation measures are funding and access to high quality information. In our view, bridging these barriers would require:

- Commonwealth supported baseline research and climate and economic modelling to create a centralised repository of high quality information which could feed into policy making by all levels of government;
- Commonwealth targeted funding for adaptation in vulnerable areas, such as the Great Barrier Reef and remote and indigenous communities;
- State departmental offices involved in adaptation planning at the regional/sectional level, and involved in intergovernmental decision making in relation to climate change adaptation measures for large, natural, cross-border systems such as the Murray Darling river system; and

- Support for local government by Commonwealth and the States in creating and implementing climate adaptation policy.

Some planning law reforms that in our view will improve the efficiency of existing regulations in furtherance of better climate change adaptation policy include:

- A review of buffer zones along park lands, bushland, low lying areas, beachfront and foreshore areas to incorporate increased climate change events. The types of development protected by such buffer zones should be considered, with particular attention paid to developments that house vulnerable members of society such as aged care facilities and hospitals, tourism activity and schools. Ku-ring-gai Council (NSW) and the Byron Shire Council (NSW) provide excellent case studies;
- A review of land zoning. The permissibility of some development in areas susceptible to weather-related catastrophic events such as bushfires, flooding, storm surge, winds and increased temperatures should be reviewed. For example, new developments of facilities for vulnerable members of society such as hospitals, aged care facilities and schools should not be located in areas without proper consideration to evacuation procedures in the event of a weather-related catastrophe;
- Amendments to Development Control Plans, Local Environmental Plans or State Environmental Planning Policies (in NSW) that prescribe building material and form. In particular, new developments should incorporate more appropriate architectural responses to climatic and geographic considerations such as orientation, eaves, cross ventilation, concrete slab or post and beam construction depending on resiliency and shaded and unshaded courtyard spaces to reduce the need for air conditioning. Regulation prescribing mandatory or financially-supported rainwater retention and reuse systems should be also considered. We submit that such regulation, together with increased community education, will lead to behavioural and cultural changes in support of environmentally sensitive living and a greater resiliency to the impacts of climate change; and
- Diversification of livelihoods and alternative employment opportunities may reduce the risk of climate change impacts on individuals and businesses. Alternatively, planning laws could broaden zoning restrictions in some areas. This is a cost-effective measure that may assist individuals and businesses in diversifying their income and adapting to the effects of climate change.

Building Codes

The ability of Australia's built environment to withstand the impacts of climate change is directly related to the standards to which the buildings will be constructed. The key document setting Australian building standards is the Building Code of Australia (BCA).

The BCA sets out design and construction principles that reflect local climates, and geological and geographic conditions. However, the BCA does not specifically address climate change adaptation by requiring construction of more durable and resilient buildings, particularly in the face of increasingly volatile and intense peak weather events.

In 2009, the Insurance Council of Australia expressly identified risks associated with the lack of minimum requirements to protect buildings in flood prone areas in the BCA. In 2010, when more than 28,000 properties were affected by the Queensland Floods, there were still no provisions in the BCA setting out the minimum construction standards to deal with surging flood waters.

The failure to include property resilience and durability in the BCA (in contrast with US and EU building codes) will result in the Australian built environment being at the mercy of future extreme weather events.

The key barrier to amending the BCA is the perception that such changes would result in additional costs to the already high cost of construction. Given that Australian building stock is already under pressure, this appears to be a valid concern. However, the 2009 estimates of the Australian Strategic Policy Institute indicate that such additional costs would amount to less than 2.5% of initial construction costs. Moreover, whilst such costs would be borne by individual and commercial property owners and developers, this initial investment would be recovered over the life of a building because of lower damage and maintenance costs, higher mean time between failures for many components, lower repair bills following extreme weather incidents and lower insurance premiums. Governments would also benefit from reductions in recovery and disaster assistance costs and provisioning attributable to higher construction standards.

We submit that the critical barrier to adapting the BCA to meet with the hazards of climate change is not the burden of costs, but rather insufficient information. The lack of comprehensive data about Australia's building stock and the impacts of climate change on such building stock, together with uncertainty on climate change predictions is a barrier to satisfying the Australian Building Codes Board and the Council of Australian Governments of the need to amend the BCA, which would require a cumbersome regulatory consultation process.

The Committee accordingly recommends the following:

- The establishment of an inter-jurisdictional work program to address the vulnerability of Australia's built environment to climate change impacts;
- A mandate that each major Australian city prepare a Climate Change Adaptation Strategy – as Melbourne did in 2009;
- Urgent revision of the BCA to include requirements for resilience and durability;
- Support for home-owners, land-owners and developers with practical guidelines and tools to assist in managing the risks of climate change;
- Commissioning research into climate change projections in the context of national, state and local extreme weather risk profiles;
- Commissioning research into the costs of adapting the future Australian built environment to cope with the impacts of extreme weather events associated with climate change;
- Commissioning research into the implications of climate change on construction materials, structures and design principles; and
- The establishment of better inter-jurisdictional networks by which information and practical experience can be shared in relation to climate change adaptation measures.

Infrastructure

A high priority reform area for effective climate change adaptation is infrastructure. For the purposes of this submission, public infrastructure is defined to include public facilities such as transport, water and energy. The adaptation of other public infrastructure such as housing, schools and hospitals is not discussed in this submission. Currently there are no clear key national level policies and programs within Australia to take climate change adaptation into account in the design and ongoing maintenance of public infrastructure.

It is critical at this stage to identify that there are different adaptation needs and different barriers and regulation requirements for new and existing infrastructure and also between short term assets (approximately less than 20 years life cycle) and long term assets (approximately more than 20 years life cycle).

We submit that there are three main barriers to effective climate change adaptation in the infrastructure sector:

- Uncertainty of climate change impact data and information;
- A lack of top-down guidance which has created a fragmented and localised response to climate change adaptation for infrastructure; and
- Internal organisational barriers within levels of government such as funding or information/understanding barriers.

These barriers translate into the following key reform options for climate change resilience (in order of highest priority) for the infrastructure sector:

- Creation of a nationally endorsed data repository and nationally endorsed design standards for infrastructure of national significance. This is particularly important for long term assets. This must involve strong collaboration with State and local governments and will require resources and training for implementation;
- Investigating market or other mechanisms to create price incentives for better adaptation levels into infrastructure developments;
- Creation of a new leadership body to coordinate climate change adaptation research and information for all levels of government and the public; and
- Direct assistance for the relocation or upgrade of critical infrastructure where there is a finance gap limiting the commerciality of such upgrade or relocation.

Insurance

Insurance plays a critical role in providing financial resilience to catastrophic weather events. In recent natural disasters such as Cyclone Yasi and the 2011 Queensland floods, the insurance industry paid approximately \$1.26 billion to insured Queenslanders. These payments industry assisted individuals and businesses with recovering from damage caused by the cyclone and floods.

Insurance, however, only provides financial protection to the extent that individuals have subscribed to insurance policies, the insurance policies cover the relevant contingency and, in relation to building insurance, rebuilding costs are accurately estimated. In 2005, the Australian Securities and Investment Commission released a report that estimated that 2-15% of homes in Australia are uninsured with 27-81% of consumers underinsured by 10% or more against rebuilding costs.

The National Disaster Review (NDR), which was released by Treasury in September 2011, comprehensively reviewed the federal and state insurance arrangements for dealing with natural disasters with particular focus on floods.

We have identified the following legal barriers to effective climate change adaptation in relation to insurance:

- The coverage of insurance contracts may be unclear. For example, individuals may believe that they are covered for “flood” damage, when their policies only cover storm damage. Another example is that individuals may believe they are covered for “bushfire” damage, when their policies only cover “fire” damage.

- The collateral benefits of insurance policies may be unclear. For example, an insurance policy may cover damage, but may not cover the cost of removal of debris resulting from the disaster either within or adjoining the boundaries of the insured's property.
- Precautionary clauses attached to insurance coverage are often unclear. These clauses operate to exclude the liability of insurers such as a requirement to keep "all reasonable precautions for the safety and protection of the building or site."

In our view, these barriers may be addressed by amending the Insurance Contracts Act 1984 (Cth) and/or the Insurance Regulations 2002 (Cth) to include:

- Standard definitions of "flood" and "fire" for all contracts of insurance;
- Standard agreements for home and contents and building insurance for consumers, with variations for different types of residential premises; and
- Clear guidelines on precautions that should be taken by insured policyholders.