

11 June 2012

Barriers to Effective Climate Change Adaptation **Productivity Commission** LB2 Collins Street East Melbourne Vic 8003 climate-adaptation@pc.gov.au

# Torres Strait Regional Authority submission to Productivity Commission Inquiry into Regulatory and **Policy Barriers to Effective Climate Change Adaptation**

The Torres Strait Regional Authority (TSRA) is grateful for the opportunity to provide input into this important inquiry beyond the official submission date of 8 June 2012. As the lead agency providing development, cultural and environmental support to communities in the Torres Strait, TSRA with its partner agencies, is actively engaged in progressing both climate change adaptation and mitigation strategies as outlined in the Torres Strait Climate Change Strategy.

A number of low lying communities in the Torres Strait are particularly exposed to climate change impacts, in particular expected increases in sea level. All communities in the region have a high level of vulnerability to climate change impacts due to the remoteness of the region and issues associated with indigenous disadvantage.

# TSRA makes the following comments in relation to the draft PC report "Barriers to Effective Climate Change Adaptation."

TSRA broadly supports this discussion and recommendations put forward in the draft report, but would like to highlight several key areas of concern.

Whilst TSRA supports in principle a move to more flexible arrangements, TSRA would also caution that in general any restructure of regulations and policies to enhance flexibility need to be mindful that such changes are made in a manner that does not endanger valuable natural and cultural assets. Maintaining and restoring ecosystem healthy and functionality is going to be a core component of assisting societies capacity to dealt with climate change impacts, and this is particularly relevant to remote indigenous communities such as those across northern Australia, whose cultural, spiritual and physical wellbeing are highly reliant on healthy ecosystems. Any moves to increase the flexibility of markets or capital need to be considered carefully in light of unintended consequences on natural and cultural assets, and should be coupled with internalisation of environmental and social costs to reduce the transfer of real costs to other communities or generations.

The TSRA suggest that the PC definition of 'Effective' climate change adaptation as "actions that enhance the wellbeing of the community" is not particularly useful in the context of dealing with the issue of climate change, and offers little insight as to what is a useful adaptation. There are many actions that might increase community wellbeing in the short term that may well that compromise community wellbeing in the longer term. The emergence of the climate change problem is a case in point, being the result of many short term decisions aimed at promoting community wellbeing with severe long term consequences.

TSRA suggest a more useful definition would be "actions that decrease community vulnerability to climate change impacts whilst building community capacity respond positively to enforced change." Further, TSRA suggests that principles be developed for the development of adaptation indicators that can be used to meaningfully assess the success of adaptation measures. Such indicators need to be developed locally to meet regional circumstances. Without such measures, and with such a broad interpretation of success, it

will be difficult if not impossible to properly evaluate if measures put forward to advance adaptation are in fact doing so.

Critically, effective adaptation also needs to focus not just on how communities respond to change and prepare for extreme events, but also on communities capacity to recover from events as a component of effective adaptation. Lack of consideration of this dynamic is a major weakness in the PC report. A key emerging risk is that communities (and ecosystems) will find it difficult to cope with and recover from multiple sequential stressors, and decisions around adaptation need to factor in this temporal dimension of sequential stress events.

The role of the Australian Government – the draft PC report suggests adaptation is best coordinated through the COAG process, beyond which there is no role for the Australian Government. TSRA recommends this is amended to also include the Department of Climate Change and Energy Efficiency as a lead agency funding and coordinating climate change science and climate change adaptation research.

TSRA also strongly disagrees with the proposition put forward in the report that the Commonwealth only has a minor role in climate change in climate change adaptation. Government will be required to play a key role through policy reform and funding in many areas to facilitate and enable effective adaptation to occur.

The PC reports focus on capacity building is appropriate and TSRA supports the recommendation that specific climate change adaptation reform activities should concentrate predominately on capacity building. TSRA would further qualify this by saying the focus of capacity building should be on building local community and environmental resilience. TSRA also recommends the report place a more prominent focus on appropriate planning frameworks, local scale projections, and knowledge of adaptation options in its recommendations.

The TSRA also suggests that consideration be given to the Commonwealth establishing a significant climate change adaptation grants program where funding can be made available for projects that can demonstrate the required background research and assessments have been undertaken to justify investment.

### **Climate Change Science**

The TSRA suggests that the section on the science of climate change does not adequately nor accurately portray the inherent risks and dangers of climate change, nor does it accurately reflect the dynamics of the climate system, emphasising instead gradual change (chapter 2.1). This is at odds with climate science, where it is recognised the climate system is non-linear and susceptible to abrupt changes associated with certain thresholds or tipping points.

The climate system is also subject to significant variability leading to extreme events that lie beyond the average conditions, and which carry a disproportionally greater risk. The capacity to respond to both incremental changes and fluctuations that drive extreme events should both be core considerations of this report. The non-linearity of the system is a critical consideration in adaptation. This weakness in portrayal of the dynamics of climate change also weakens the PC reports approach to risk prioritisation (see below).

The PC report would also be more complete with some reference to limits to adaptation. A common misconception is that society has endless capacity to adapt to climate change. A focus on the limits to adaption provides additional attention on the critical need for the urgent mitigation measures that need to be implemented to reduce the chance of reaching societies limits to adapt to climate change. Climate scientist James Hansen has suggested that adaptation is not an option beyond a 4 degree rise in average global temperature due to the sever impacts on human and ecosystem functionality. Many ecosystems have critical adaptation thresholds well below this threshold beyond which the systems will switch to a new, usually more depauperate states. There is no evidence to suggest human societies will not confront similar limits.

## Risk prioritisation

TSRA suggests the approach of prioritising short term/current climate variability around a gradually changing average as the most effective response to managing current and future climate variability fails to appreciate the need for a combination of measures to respond to near term and long term threats. While improving the management of current climate impacts will build resilience, this should not be at the expense the need for sustained long-term actions required to prepare and respond changes in climate exposure. TSRA suggests the approach advocated in the report of deferring these "autonomous" actions is flawed and requires reconsideration. Not all climate change impacts will be able to dealt with effectively when these impacts actually occur (the assumption made in the report), and to promote this approach to prioritisation of investment and actions could itself be a maladaptive response to climate change.

### **Remote Indigenous Communities**

The issue of some sections of Australian society being particularly vulnerable to climate change impacts is addressed to some degree in the report (pg17). However TSRA feels the particular vulnerability of indigenous communities, and notably remote indigenous communities, is not given adequate focus and attention given their high levels of vulnerability to climate change.

The majority of planning and financial policy frameworks at all levels of government are (understandably) designed for the broader Australian community, and as such often do not adequately consider the particular circumstances and needs of remote indigenous communities. A case in point is the Queensland Coastal Plan, which in its draft form did not adequately consider how small island communities would accommodate any further development outside of coastal hazard zones when the entire island fell within such a zone.

If remote indigenous communities are to be able to respond adequately to current and future climate change challenges, it is important that government regulations and policies enhance their capacity to do so, or at the very least, do not inhibit their capacity to respond. As such TSRA supports the PC focus on more flexible arrangements that facilitate adaptation. By way of example, consideration should be given to more flexible housing codes to allow homes on island communities to be built to relevant local standards and using traditional techniques rather than having to conform to a Queensland wide code that often results in expensive buildings that are not entirely suited to island conditions.

### The role of local government and Land use planning.

The TSRA supports the draft land-use planning recommendations (pg 16), but would add that cost benefits should also incorporate any potential adverse effects on adjacent intertidal and marine areas.

Indigenous councils also often have limited capacity to adequately implement land use plans or assess development a proposals. Ensuring indigenous councils are properly resourced to assess and manage climate risks through their planning schemes is a key areas that required additional focus in the PC report.

As the PC report highlights (pg 13), the roles and responsibilities of local government are often not particularly clear. This is particularly important in the area of disaster planning and response where confusion may exist between the role of the state and local government, both of which have legislative responsibilities in this area. Clarification of the roles of local government in line with their capacity restraints would benefit community's capacity for adaptation.

Local governments often face capacity restraints (pg 13). Indigenous councils are often especially constrained in their capacity to adequately implement land use plans, assess development proposals and implement disaster management plans. Ensuring indigenous councils are properly resourced to assess and manage climate risks is a key area that requires additional focus in the PC report.

Yours Sincerely,

Wayne See Kee Chief Executive Officer Torres Strait Regional Authority