Initial Submission to Inquiry into Climate Change Adaptation

My input is in the capacity of an individual. I had a long career in the Australian Government in all dimensions of the climate change issue (including climate change adaptation), environment, and natural resources management; and have a continuing interest in retirement.

The Productivity Commission Inquiry provides the critical potential to deliver advice nationally on an issue that will fundamentally affect the future of Australia.

To date, the main focus of the Australian Government, States, business and others has been upon how to progress action on the enormous challenges of reducing national and global carbon emissions - the root cause of a changing climate. But in reality, little has been done to characterise the problem of adaptation to the inevitable impacts of climate change (with atmospheric greenhouse gas concentrations continually growing), and how to respond.

(Reference in the PC Issues Paper to Box 5 reflecting substantial action is a misrepresentation - those examples are worthy beginnings (in most of which I had a personal involvement), but they do not represent long term or comprehensive answers.)

The Beginning - A Framework for dealing with the problem

This PC Inquiry is directed to address 'barriers' to adaptation. An approach based upon barriers assumes that the problem is well characterised and that we have lessons based on experience to address the problem. This is not the case with climate change adaptation, which the Issues Paper correctly mentions as being at an early stage.

The PC Issues paper makes some beginnings in describing the problem - with reference, for example, to the pervasive future effects of the impacts of climate change upon Australia; and noting the uncertainties in capability of climate change science to extend from general characterisation of future climate conditions to specific impacts at local scale and for some key climate events.

However, the PC Issues Paper does not come to grips with the true realities of the problem. For example, characterising the problem as unfolding in a way 'felt gradually over an extended period of time' (p5) is true only in a very limited physical sense - but is misleading when it comes to the question of how to frame today an adaptation response framework that is economically, socially and environmentally sound and resilient progressively for the long term. (The same 'boiling frog' analogy could have been attached to the emerging problem raised by The Treasury in its earlier analysis of livelihoods for the ageing population, which gave rise to fundamental changes in superannuation and related policy frameworks.)

The 'boiling frog' characterisation should be cast in a risk management response framework for climate change adaptation.

The PC needs to begin with analysis of present climate (notably climate variability) as a risk factor in public policy, business decision making, and sustainable natural resources and environmental management. That is the point of departure. How does Australia frame climate variability as a risk factor (eg what are the land use planning policies to deal with floods, and how have we evolved policies in response to bitter experience of extreme climate events).

Fundamentally, the PC Inquiry needs to lay out a logical framework that is specific to the challenge presented by climate change adaptation. Some elements are common to other public policy issues. But many features are strongly characteristic of the climate change adaptation conundrum. An impressionistic dabbing of the paint brush will not suffice to answer the question - what is needed is a strongly articulated expression of the individual characteristics of the problem, and a structured approach to dealing with it. The PC Issues Paper flags some of these features, but lacks an overall defining conceptual framework.

The elements needing to be addressed include:

- What is the risk management framework employed in Australia today to deal with climate risks
- Australia's current success (and failings) in dealing with present climate change variability
- The probabilistic changes forecast (even with uncertainties) for future climate conditions over time epochs (say 2030, 2070 and 2100) that are relevant to major public policy and investment decisions
- What are the adaptation actions that Australia (especially governments and business) should take in the next 10 years to address the risk profile of climate change.

That discussion on adaptation response needs to grapple with:

- Characterising the legacy problem of how to deal with vulnerability of current assets to future climate change conditions. (That is, past decisions were based on a progressively sound foundation of climate 'stationarity' - long term averages, with some growing understanding of frequency and location of extreme climate events.)
- How to frame the myriad of decisions occurring today, tomorrow and the future in public policy, business investment, and community actions, so as to be resilient for future climate conditions. This comes down to deciding which decisions today and in the near future need to be anchored in the future climate realities; and what are the areas where we can delay dealing with factoring climate change into new decisions .

Scope

The PC Issues Paper correctly notes that climate change impacts will in time affect almost all features of Australia's economy, social welfare and the enviroment.

To attempt a holistic treatment of the problem in this Inquiry would be likely to produce an unrealistic task - leading to superficial general observations that are sound

in an a broad sense, but not really driving an action focus.

It is clear that key parties are looking to the PC to frame a clear road ahead. For example, the recent report of the National Disaster Insurance Review noted submissions on climate change dimensions but pushed them across to the PC Inquiry.

I recommend that the PC Inquiry takes a bifocal approach:

- Set out a general framework for climate change adaptation (building upon, for example, the 2010 Australia Government adaptation policy statement; and the concepts laid out above)
- Select a few key areas as exemplars to lay out in some detail an adaptation policy response. These could be for example urban planning, major infrastructure investment and water resources management. Do those well from A-to-Z, as a model for how to approach other areas of public policy, business decisions, and community response. Without this the PC Inquiry is likely to be a fizzer.

In addition, the PC Inquiry should address development of fundamental planks that will underpin a near- and long-term adaptation response. Examples are:

- Advancement of the science of climate change impacts with outputs relevant to adapting to real world climate change impacts (including characterisation of uncertainties)
- Building Australia's climate change knowledge capability - as reflected in the current National Climate Change Adaptation Research Facility (whose Board I chair) and the CSIRO Adaptation Flagship
- Current age provision of spatial data for cities, water, land , and seas in a way that can be used to assess future climate change impacts risks (physical, social and environment) and the efficacy of response options.