## **Climate Change Adaptation Research Grants Program**

- Social, Economic and Institutional Dimensions Projects

## **Project title:**

Valuing adaptation under rapid change: anticipatory adjustments, maladaptation and transformation.

<u>Principal investigators:</u> Professor Roger Jones <u>Lead organisation:</u> Victoria University

## **Objectives:**

To develop a robust economic methodology that will support decision-making on adaptation actions and investments ranging from adjustment to transformation. The methodology will explicitly identify and respond to the limitations in current approaches. It will draw widely from different disciplines and account for rapidly changing climatic and socio-economic factors.

## **Project design and methods:**

Four key elements contributing to the economics of adaptation; information, regulation and standards, institutions and public investment, will be investigated in the Australian context. The marginal benefits of adaptation measures, a common test to measure the utility of various options, suffer from both evaluation and distribution problems. For example, benefits that are easy to measure such as monetary benefits may obscure more important positive and negative externalities at a range of scales. How benefits are distributed publicly, privately and over time; and the equity of those distribution measures is also relevant. We will explore methods for a "good" adaptation test that accounts for existing information and new learning over time.

<u>Step 1</u> draws on adaptation literature to identify key issues 'and priorities for adaptation, and the limitations and gaps in current economic assessment of adaptation. The project team will assess published material and draw on the expertise and experience of our advisory panels. A national workshop, if possible timed to coincide with a prominent meeting on adaptation, would help ensure maximum input. We expect some international participation [*Outputs: workshop and a report*];

<u>Step 2</u> addresses the issues and priorities currently absent from the economic assessment of adaptation by matching these against the disaster loss assessment literature - which has attempted to come to grips with intangible losses, the costs of maladaptation and the costs and benefits of some types of transformative action - and other relevant sources of expertise including risk management, financial markets, ecosystem assessments, technology design, military strategy [*Outputs: journal papers & a report*];

<u>Step 3</u> will develop a draft approach based on the previous steps for assessment to be presented for discussion at an international workshop drawing on our International Panel and others. At present this is planned to coincide with the Adaptation Futures Conference in Arizona 29-31 May 2012. This will allow us maximum exposure to key international researchers and to workshop the project's initial findings. [Outputs: discussion paper with draft approach and workshop];

<u>Step 4</u> The conclusions from the International workshop will be used to develop an Australian approach. We will test the draft approach with decision-makers 'on the ground' in Local and State Government bodies and public companies. These findings will be synthesised into an evaluation methodology [*Outputs: workshop and report*];

<u>Step 5</u> The final product, a methodological guide for decision-makers linking methods to classes of adaptation decisions, will be developed from the workshop and case study experience [*Outputs: report and journal paper(s)*].