

Dear Professor Garnaut

The attached submission from Healthy Soils Australia addresses *Issues Paper 1: Land use, Agriculture and Forestry*.

In addition to answering the 25 specific questions on which you sought advice, we offer an ecological perspective on climate change that we believe has important implications for both mitigating and adapting to the largely unpredictable changes in climate.

The scientific evidence of a close relationship between the physical and ecological processes associated with climate are well-established, however it is missing in the IPCC reports and in much of the climate modelling currently being undertaken. This is a pity as much of the potential for mitigation and adaptation is of an ecological nature achievable through well-researched processes of bio-sequestration.

The Australian landscape provides the natural capital and ecosystem services on which the whole economy depends. While agriculture and forestry together contribute only around 4% of GDP in recent years, these sectors are responsible for some 28% of greenhouse emissions. More importantly, these sectors occupy over 60% of Australia's landscapes. It is the sheer scale and diversity of these landscapes that provide the bulk of the new opportunities, including, in particular, economic opportunities.

It is our submission that the farming and forestry sectors in Australia are well placed to make a net contribution to the Australian economy (beginning at some \$500million per year and growing to \$100 billion per year at current carbon prices) through a well-designed carbon trading system. However this potential can only be realized if these sectors are fully included in any trading arrangement. They will need to meet the cost of their emissions (thus providing a downward pressure through careful management of their own carbon) as well as being paid for any credits for the emissions they manage to bio-sequester. Put simply, we are proposing a system of *carbon farming* that has a far greater potential for sequestration than any other known technology.

The real danger for agricultural and forestry is not climate variability itself, a fact of life to which these sectors are well adapted, but the economic policy settings that might be introduced to address climate change.

As the recent restrictions on land clearing have demonstrated, these sectors are excluded from participating in carbon accounting processes thus effectively being required to subsidise (without compensation) unsustainable practices originating elsewhere in the economy.

While our submission deals with the potential for agricultural and forestry lands to bio-sequester carbon, the Review should note that similar techniques can be applied in public and indigenous lands and even urban areas. In short, Australia has the know how to judiciously apply bio-sequestration techniques throughout the country.

Yours sincerely

Dr. John Schooneveldt
Director