INTRODUCTION

This submission to the Garnaut Climate Change Review answers the first question in Issues Paper 1 entitled Climate Change: Land Use – Agriculture and Forestry. This asks how the need for Australian adaptation to climate change should occur. The answer is that a coordinated regional and related industry and community development approach should be taken to the protection of the natural environment. This includes its protection from greenhouse gases. In this context, the ability to effectively develop, monitor and evaluate the impact of investment strategies designed to meet the sustainable development needs of global communities becomes increasingly important for everybody. The propositions I outline on page 2, in regard to land and related industry management, to reduce risk of climate change and its effects, must be understood in the context of continuing historical developments calling for broader regional and industry planning to obtain sustainable development through more transparent and effective competition to manage risks better.

When the Hawke Labor Government came to power in 1983, it began to address the long term problem of Australia's increasingly unacceptable terms of trade, primarily through an economic management agreement (an 'accord') with the trade union movement. Eleven tripartite (government, employer and union) industry councils were also set up, covering the manufacturing industries. These conducted stocktakes of industry sectors and developed strategic plans. This process moved employers and workers' representatives from an automatic reliance on barrier protection towards strategies which included economic incentives for microeconomic reform to make organisations more competitive in the longer term. In 1992, Australian Commonwealth legislation introduced a superannuation guarantee. All employers were henceforth expected to provide a minimum level of award based superannuation support for employees. Industry managed superannuation funds have become major players in investment. Think big with China?

Changing the current situation of global poverty, disease and environmental degradation through more effectively targeted superannuation and related national investment strategies is now a major challenge facing Australia and many other nations. Policies to prevent climate change and to combat its effects are in the front line of these global discussions. In the edited papers from the Annual Bank Conference on Development Economics entitled ‘Governance, Equity and Global Markets’ (Stiglitz and Muet, 2001), Attanasio states that:

'The lack of synchronization between demographic trends in the world constitutes an important opportunity to reduce the impact of demographic changes on pension systems. Northern capital invested in less developed regions could yield higher returns to finance the retirement of the US and European baby boomers and at the same time could help the development in Latin America and other developing regions’ (p. xvi)

This is also the global and national context in which the following propositions are made. Understand the lessons of Enron and don’t let financial market players keep ripping off our money. Cut fees and charges! Provide more market stability! Be more competitive!
The following general propositions are put on how to obtain this in industry settings:

**Proposition 1:**

*Consider the management of agriculture, forestry, national parks and other private, government or indigenously owned lands together, as a logical management grouping.*

*Industries, governments and communities should cooperatively establish coordinated, consultative and transparent planning, risk management and underpinning fund management structures, which are also driven competitively, on a regional, national and international basis, to attain broadly agreed goals and triple bottom line accounting.*

**Proposition 2:**

*The environment related aim of work and related community management should be to improve air, land and water quality and to reduce loss of biodiversity. This is ideally an aspect of triple bottom line accounting, which seeks to satisfy environmental and social goals, as well as financial ones, which are collaboratively and openly defined for best effect.*

**Proposition 3:**

*Establish a general premium and industry based financial model, such as that already pioneered in health service provision, in the context of continuing debate over the construction and implementation of risk management options at the workplace and for trading, starting with the risk of greenhouse gases.*

*The principles of state occupational health and safety, rehabilitation, insurance fund management and industry superannuation investment systems provide guiding models which may be adapted or broadened to meet all related risk management needs. These include the need to reduce production of greenhouse gases which lead to climate change and the related need to deal with past effects of this production. The risk and fund management principles for national health promotion, rehabilitation, insurance and related public or private fund management are also instructive in this context.*

**Proposition 4:**

*Make risk management definitions and all related management, consultation, funding, investment, investigation and dispute resolution systems and practices as clear, open and consistent as possible, to enhance the productivity which results from transparent competition, unless another course of action appears to be in the public interest.*

*See the attached articles on the comparative development of health related risk management, rehabilitation and funding systems. The inconsistent and apparently dysfunctional approach now being taken to risk management by the Local Adaptation Pathways Program of the Australian Greenhouse Office (AGO) is also addressed.*
Proposition 5:

The funds necessary to reduce greenhouse gases depend largely on how quickly and effectively one wants to reduce them. Whether one is funding an undertaking through the levy of a tax, a premium, a related investment approach or through a combination of many funding sources, one needs to approach the question of whether any associated risk being treated is to be partially or fully funded. The extent to which risk rating ought to be borne by a community, industry or individuals must also be faced.

Proposition 6:

Like many financial and legal considerations, the price of risk may primarily have political, rather than economic drivers, which are often feudally driven. This appears increasingly idiotic from the perspective of the general public and scientific interest in health and environment protection. The best methods of gaining relevant education and skills for innovation, related research and further development require consideration in this context. More open, flexible, better quality and cheaper education, research and dispute resolution approaches are discussed in the attachments.

The portfolios of the whole Cabinet team appear relevant in this regard. The most obvious way to proceed would be for Cabinet members to invite consultation and discussion from all their constituents on all related aspects of risk management design. The key stakeholders in this process are the Australian people. I attach related information in support of this recommended process.

Proposition 7:

The general risk management aim of the community, industry and individual, should begin with understanding the particular living and production environment under consideration in order to reduce its related risks. The key environmental step is then to identify and prioritize risks to air, land, water quality and all related biodiversity on a related regional, industry and organizational basis. Then develop cooperative regional and industry programs and related projects which aim to control the risks to air, land and water quality, and to reduce loss of biodiversity. Evaluate the comparative outcomes of this activity and allocate future funds as a result of the comparative results.

Consider environment rehabilitation and other key goals in a related risk management context and provide funding incentives to the private and voluntary sectors to assist in the cooperative achievement of international, national and related regional goals.
THE PROBLEM OF THE PERSISTENCE OF FEUDAL RELATIONS

As a result of environmental degradation, including climate change, Australia now faces a similar question to the one the British economist, JM Keynes, asked in 1939 when he said:

The question is whether we are prepared to move out of the 19th century laissez-faire state into an era of liberal socialism, by which I mean a system whereby we can act as an organised community for common purposes and to promote economic and social justice, whilst respecting and protecting the individual — his freedom of choice, his faith, his mind and its expression, his enterprise and his property’.


Should Marx have referred to the idiocy of the feudal, rather than the rural, life? You bet. All recommendations made in this submission aim to achieve management transparency and reduce associated red tape, which lawyers always love to manufacture, against all reason other than their own. Their feudal logic is based on ignorant, prescientific, principles, which encourage secretive division interminably. In 1910, Weber keenly understood the feudal problem which Australians still face a century later. He said:

‘As soon as intellectual and aesthetic education becomes a profession, its representatives are bound by an inner affinity to all the carriers of ancient social culture who doubt that the dominion of capital can give better, more lasting guarantees to personal liberty and to the development of intellectual, aesthetic and social culture than the aristocracy of the past has given’…They want to be ruled only by persons whose social culture they consider equivalent to their own and they prefer the dominion of the economically independent aristocracy to the dominion of the professional politician…..(They) stand in deep antipathy opposed to the inevitable development of capitalism and refuse cooperation in the rearing of the structures of the future’. (Cited in Seidman, 1983, p. 211).

This is a global legal problem. If nations do not fix it now, communities are more likely to end up degraded and dead sooner, rather than later. For example, in 2007, lawyers haven’t even caught up with the dictionary definitions produced by the European Enlightenment, which outline the commonly shared classification systems necessary for any broadly scientific approach to problems. They still refer instead to the feudal concept of ‘interpretations’, which may just repeat a word in question. How many centuries before lawyers think of using Google’s help? The fact that legislation often has no stated aims does not help injury prevention. The legal paradigm and monopoly are so authoritarian, determinedly ignorant, adversarial and dysfunctional that they blow the mind and all fair and effective competition with it. Unfortunately lawyers dominate everybody in Australia Why not get rid of all this feudal legal trash which enriches the monopoly who wield it at our expense? Anybody with a brain should be able to design better management systems in plain English. Can Bob the Builder do it? Yes he can. (See attached discussion.)
COMBINE REGIONAL AND INDUSTRY RISK MANAGEMENT APPROACHES

In any community, producers and consumers may improve or degrade the quality of air, land or water which surrounds them or which is passed on to others. The highest aim of the Australian community in regard to ‘adaptation’ to climate change is reduction in the loss of quality of life, which is also intimately related to loss of biodiversity. Logic and the need for transparent management both appear to indicate that all risks to the environment arising from the production and consumption process should be managed together, in a consistent fashion, unless another course of actions appears appropriate. Discussion of international biodiversity goals, Australian health management and related attachments, clarify the required cooperative management forms.

The first principle of the Rio Declaration on Environment, which was agreed by United Nations (UN) members in 1992, states that human beings are at the centre of concern for sustainable development and are entitled to a healthy and productive life in harmony with nature. A risk to health (which may be defined as a risk to the quality of life), occurs before the loss of biodiversity, (which is species death). Production and consumption are major source of risks to health and for loss of biodiversity, as well as major sources of greenhouse gases and climate change. For this reason, it is logical that such risks are all managed together, consistently and cooperatively, unless another course of action appears to be in the public interest. Competition and an informed market are vitally necessary to assist fund managers and others to produce the desired, triple bottom line results. Perfect competition depends on perfect information. Both depend on transparent management.

Agriculture and forestry are profit driven industries. Since white settlement of Australia the protection of biodiversity, (which is primarily a regulatory aim), has been the role of governments which work to protect public reserves and national parks. In Australia, approximately 62% of land is classified as privately owned, and this includes both freehold and leased Crown lands (Fitzsimmons and Wescott, 2004 citing Geoscience Australia, 2003). However, limited government budgets and competing land uses such as agriculture, forestry, mining or other rural and urban development limit the extent to which reserves can guard biological diversity. It appears logical that management aimed at attaining all environmental goals should be conducted cooperatively, by relevant industry, government and community representatives, with a planned and competitive approach.

Therefore, consider agriculture, forestry, national parks and other government or indigenously owned lands together. Community and industry concerns about the effects of global warming in any regional environment are logically linked to cooperative national industry, government and community planning and management to reduce the degradation of air, land and water quality which also leads to the loss of biodiversity in any natural environment. For best effect, information in the Garnaut Climate Change Review discussion paper entitled ‘Climate Change: Land use – Agriculture and Forestry’ needs to be complemented by an equal awareness of the key environmental concerns and related
government responsibilities which influence outcomes in all regional environments where people seek their own sustainability or something better.

Garnaut follows Pittock (2003), in defining ‘adaptation’ to climate change as ‘adjustment in natural or human systems in response to actual or expected climatic changes or their effects, which moderates harm or exploits beneficial opportunities’. ‘Mitigation’ is defined as ‘a reduction in net greenhouse gas emissions’. I wonder about the utility of Pittock’s definitions, which appear far from obvious to those unfamiliar with his comparatively exclusive language. (See attached discussion on the Australian Greenhouse Office.) In contrast, the occupational health and safety expert talks more normally, about preventing or reducing the risks of production to workers, clients and related communities, and for the need to fund the rehabilitation effort if harm nevertheless occurs, in spite of all precautions. The health promotion expert may conceptualise a closely related risk management task primarily as the effort to encourage individuals and communities to undertake healthier lifestyles and use better treatment and rehabilitation practices.

Many professional perceptions and endeavours ideally need to be thought of in terms of their ability to manage risk, to meet or enhance the common standards and diverse choices made by communities, industries and individuals. This is made more difficult wherever professionals seek to pave themselves more lucrative career paths by unnecessarily differentiating their theoretical paradigms and related expertise from that of professional fellows. Words are the cement used in these professional silos that usually hate to address each other in the public interest, rather than from within the confines of their own preferred career trajectories, comparatively far from any ruder debate or contradiction. Plain, consistent, English wording should therefore support consistent concept usage wherever possible. Otherwise the concept of risk management will be mainly left to those whose work is gambling with other peoples’ money, while reaping personal rewards every time a trade is made, whatever the outcome of this process for their economic dependants.

**CURRENT BIODIVERSITY GOALS AND MANAGEMENT DIRECTIONS**

The importance of biological diversity (biodiversity) was the focus of discussion of the Convention on Biological Diversity, during the Earth Summit in Rio de Janeiro in 1992. Biodiversity is often thought of in terms of species diversity, though it also incorporates concepts such as ecosystem and genetic diversity. One of the outcomes of the Convention on Biological Diversity was a commitment by the 188 Signatory Nations to work towards three main goals. These were:

- conservation of biodiversity
- sustainable use of the components of biodiversity
- sharing the benefits arising from the commercial and other utilisation of genetic resources in a fair and equitable way.

Involvement of private landowners in conservation strategies is seen as essential to complement reserve systems and increase the conservation of less protected ecosystem types. Private land can support biodiversity in numerous ways if managed appropriately.
Areas considered too small to be declared public reserves can provide habitat for numerous species and act as pools for genetic diversity. Adequately protected land can also serve as corridors for wildlife to move between adjacent areas.

The main threats to biodiversity in Australia appear to be habitat destruction, caused by activities such as clearing for agriculture, urban development and private forestry. Introduction of exotic species has also presented a significant threat (Farrier, 1995).

The following key directions require specific regional consideration in this context:

- **National Framework for the Management and Monitoring of Australia’s Native Vegetation**

- **National Strategy for the Conservation of Australia’s Biological Diversity**.

- **National Action Plan for Salinity and Water Quality** (The plan is considered likely to have positive flow-on effects for biodiversity, through the maintenance of waterways and through restrictions on the clearing of native vegetation).

According to a literature review (O’Donnell, J. 2007), a number of different financial mechanisms currently serve either to conserve (protect) or enhance biodiversity on public and private land. Those often used are the following:

1. **Direct government purchase of land for protection purposes**
   
2. **Cash Payments** – A one-off cash payment may be made to a landholder to undertake required conservation action.

3. **Financial reimbursement & cost sharing** – A landowner may be reimbursed for the cost of shared conservation works. Examples include weed removal, fencing, and the restoration of vegetation.

4. **Tax incentives** – Tax deductions or the removal of tax debts are facilitated by some governments when landholders commit to the conservation of biodiversity.

5. **Land rate rebates** – Rate rebates can be offered by governments when land has been covenanted for environmental activities.

6. **Technical assistance & education** – Landholders may receive assistance that may include the use of machinery to undertake conservation activities, such as weed removal. The provision of technical support and education about the benefits of conservation, or improved management techniques are also useful incentives for landowner protection.

7. **Regulation Assurances** – Landholders who develop approved management plans or other agreements with governing bodies, can often be granted certain assurances, for example, a guarantee that their approved activity can continue for a fixed time period.
8. Awards schemes & recognition – Awards are granted to landholders, community groups, or companies for conservation efforts, sound environmental practices, etc.

9. Insurance Policies – Landowners can often be motivated to change land use practices if they are guaranteed that the change will not reduce their profitability. Doremus (2003) provides the example of farmers being encouraged to reduce pesticide application to acceptable levels, with a promise of compensation if the crop becomes less viable as a result. Another strategy described by Vickerman (1999), was the Wolf Compensation Fund that was developed in the United States to reduce landholder resentment about a wolf reintroduction program initiated in 1987. Landowners were compensated for any livestock that were killed by the wolves.

10. Tradeable development rights – Landholders who have zoning restrictions on the extent of their land that may be developed, may be granted the right to develop a greater proportion if they purchase the development rights of a second landholder. This renders the second landholder without rights to develop on their land, thus controlling the amount of development within an area (Michael, 2003). Another use of tradeable development rights involves the granting of the right to develop a portion of a property in exchange for placing a covenant on another part of that land (Thackway & Olsson, 1999).

The National Greenhouse and Energy Reporting Bill (2007), is currently being discussed prior to the introduction of an emissions trading scheme four years later. This bill requires measurement and report of an organization’s noxious emissions, to reduce them in accordance with lowered government greenhouse gas emissions targets. As I understand it, once an organization’s initial pollution levels are estimated, and it is in possession of an appropriate number of ‘permits to pollute’ at a monetary value first set by government, (the premium or trading price) the following options are open to it:

1. Reduce organizational emissions and sell a related number of permits
2. Maintain or increase emissions, but pay for offset (environmentally friendly types of production of equivalent value to unacceptable pollution levels)
3. Maintain or increase emissions but pay a fine to government for not reducing them
4. Maintain or increase emissions and purchase more permits in the marketplace to legitimate continuing, unacceptably high pollution.

The booklet entitled ‘Climate Change Impacts and Risk Management: Guide for Business and Government’ produced by the Australian Greenhouse Office (AGO 2007) describes the risk management process as having the following steps.

1. Establish the context
2. Identify the risks
3. Analyse the risks
4. Evaluate the risks
5. Treat the risks (p.19)
Communication and consultation are also essential, especially throughout the establishment stages of the production process. Monitoring and review are also vital, especially during the procedural stage and after completion of the project.

All organizations exist in a particular regional environment which needs to be broadly understood. In this context, steps in an organizational risk management process should be:

1. Describe the organization, the work it undertakes and its related risk management systems, including any relevant base line data supporting risk management
2. List, analyse and prioritize the major hazards involved in production as they relate to air pollution (ideally also water or land or related biodiversity)
3. Describe the aims and objectives of the proposed risk treatment program, also establishing targets where it is realistic to do so
4. Describe the strategies which are proposed to achieve the overall aim and the related objectives (Also outline any milestones related to their implementation)
5. Describe the performance indicators which will be used to evaluate the outcome of the risk management strategies (e.g. expected decline in level of emissions)
6. Estimate the cost of the risk management program to the organization (e.g. the cost of all the labour time and materials necessary for the entire process supporting risk identification, evaluation and/or risk treatment).

These six steps are consistent with the requirements of state occupational health and safety acts and national health promotion programs but are different from those recommended by the Australian Greenhouse Office, which is undesirable. (See attached discussion.) Skills development for risk management and related research also require consideration.