

Submission by Murray Scott, Heathcote NSW on  
**Issues Paper 2, Financial Services for Managing Risk: Climate Change and Carbon Trading**

Professor Garnaut,

Under 3.2, primarily dealing with insurance, I wish to address a different aspect of the topic:  
**Roles and responsibilities in climate change risk management.**

Nowhere in Issues Paper 2 do I find a reference to the responsibility of Government at all levels to integrate related developments for which conflicts or synergies affect the outcome of carbon emission reduction measures. This is particularly relevant where Government enthusiasm for privatisation and public-private-partnerships effectively fragments responsibility for public interest objectives. Perverse outcomes persist due to the punitive compensation payments incurred for contract variations to ameliorate public impacts.

In cases such as the Snowy Mountains Scheme privatisation attempt, several urban expressways and tunnels, forestry operations and the following current examples, the unfavourable balance of tender yields and revenue forgone suggests that the chief intention of Government has been to preemptively **relinquish** politically awkward responsibilities for integrated cross-sector planning and management. If we are to succeed in significant reductions in greenhouse gas emissions, Governments must be held accountable for their responsibility to govern, whether by facilitation or regulation of private enterprise, or failing that, by retaining or reclaiming Government control of critical developments. This is a war that we must win and we cannot afford sabotage by a fifth-column of industry lobbyists or risk-averse politicians.

A few current examples in NSW include:

#### **Privatisation of electricity supply in NSW**

The stated purpose of leasing generators and selling retail electricity is to finance the construction of a new coal fired power station. A climate-aware policy would seek to avoid such development until the hypothetical new sequestration technologies were available to incorporate efficiently from the planning stage. During the difficult transition to low emission technologies, electricity supply and demand interactions cut across many market sectors and clearly demand coordination at State and Federal Government levels.

#### **Sydney Water's Desalination Plant.**

Desalination is a prime example of electricity consuming processes for which the output, fresh water, can be efficiently stored and readily substituted by water withdrawn from storage. If such a desalination plant was constructed in modules and operated at a variable production rate, the existing water storage and reticulation system would effectively serve as an electricity storage medium of very high capacity and efficiency. Such a storage scheme would facilitate the incorporation of intermittent renewable generating technologies such as solar photovoltaic, overcoming the common taunt that such generators cannot provide "base load" capacity. Operated in this way, a 50 MWatt desalination plant could thus absorb that level of photovoltaic power capacity without imposing additional base-load demand. As Sydney Water's construction and operating contracts are currently framed however, it will impose an additional base-load demand to cover the intermittency of the renewable electricity supply the NSW Government has undertaken to employ. As with so many private-public-partnership ventures, lack of integrated management will defeat potential carbon emission controls.

#### **Coal mining approvals.**

It is obvious that on the timescale for developing and exhausting a new coal mine, international action is essential to greatly reduce the consumption of coal. Mining proposals or extensions approved now will only be "profitable" if they keep producing well beyond the 2020, perhaps even the 2050 horizons, ie if greenhouse mitigation attempts fail. Nevertheless Governments are still issuing approvals. Adding to the perversity of these decisions is the incredible folly of approving longwall mining within 500 m of streams and infrastructure in the Sydney water catchment. These approvals represent the most blatant failure of integrated sustainability planning.

#### **Optimisation of Renewable Power Investments.**

The desalination example above is but one where cross-sector coordination could reduce greenhouse gas emissions. If planning and regulations are facilitated, or tax and/or research assistance is provided by Governments, private enterprise is quite capable of putting together synergistic developments such as waste recycling, coal-seam or landfill gas extraction. Resources of all kinds, material and human will be stretched to meet greenhouse gas reduction targets and Government oversight is required for the deployment of even undoubtedly beneficial technologies. It would be counterproductive for example to adopt complex technologies as a panacea for inadequate housing design in green-field urban subdivisions. Planning instruments must recognise the life-cycle greenhouse gas burden and other environmental externalities of competing approaches such as :

- photovoltaic panels plus refrigerative air conditioners vs. wider eaves, through-ventilation and tree cover
- public transport vs. cycleways vs roadworks vs. provision of neighbourhood facilities within walking distance
- renovation or replacement of buildings, equipment and plant for energy efficiency vs the embodied energy of materials consumed
- “aesthetic” regulations or inflexible tree preservation vs efficient use of water tanks, clothes lines and solar hot water or photovoltaic panels
- birdstrike on sites favourable for wind turbines vs habitat conservation elsewhere

Their effects must be monitored to ensure that whatever carbon tax or trading scheme is established, its parameters are adjustable to avoid perverse outcomes.

These considerations are rather obvious and I realize that I may have missed their discussion in another section of your Review. In any case I look forward to strong recommendations on these aspects of Government responsibility.

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