

## **Introduction**

This submission will mainly address issues arising as a result of the Garnaut Review Reports, as they are pertinent to the implementation considerations that the Green Paper seeks to address. The Green Paper and the Garnaut report generally provide a comprehensive review of the science of climate change and of the economics of an emissions trading scheme. However the proposals do not sufficiently take into account several relevant aspects of these issues as they relate to Australia, nor do they adequately consider alternative policy options.

In particular little account is taken of any alternative proposals for dealing with global warming should trading schemes prove inadequate. Further, no account is taken of the contribution made by Australia's coal exports to increased global warming. Coal is taken as an export commodity that may suffer falls in volume. No account is taken of how export revenues could be protected and enhanced, nor how global mitigation outcomes could be improved, by more effective management of coal resources.

The trading scheme proposals rely heavily on the assumption that carbon capture and storage will be globally effective. Little consideration is given to the likelihood that it will not be. The reliance on trading schemes alone, together with the reluctant recognition that their effective global application is unlikely, has led Professor Garnaut, in the Supplementary Draft Report, to recommend an abatement policy for Australia that is consistent, on his own admission, with global catastrophe. This situation is unacceptable and alternative proposals must be considered.

## **Australia and coal**

Coal is the most carbon intensive fuel. Most of Australia's coal production is exported. Australia has the largest reserves of coal available for export and is by far the world's largest exporter of coal. Australia supplies almost 40 per cent of globally traded coal. Coal consists mainly of carbon. Coal exports are Australia's largest carbon emission, larger than all other atmospheric carbon emissions combined. The Garnaut Review Reports ignore this fact.

Currently, Australia's annual gaseous emissions of carbon dioxide amount to about 590 million tonnes. Our exports of coal are about 250 million tonnes. Almost all of this coal will later be turned into carbon dioxide, with a mass of about 740 million tonnes. So, more carbon already leaves Australia in ships than is discharged into the atmosphere. Despite the ambition of reducing atmospheric emissions, current investments will double our coal export capacity within a few years.

When this happens, Australia's contribution to global warming as a result of our coal exports will dwarf all other domestic sources of emission. The proposed emissions trading scheme does nothing towards addressing Australia's global responsibility regarding coal in this regard. Whatever carbon emissions any domestic scheme can possibly save will be

insignificant compared with the projected increase in Australia's carbon emissions in the form of coal.

Both the Garnaut Review Reports and the Green Paper on Carbon Pollution fail to address this issue. The only concern is to protect Australia's coal exports from any impact of a carbon price as a result of the trading scheme. Energy intensive trade exposed industries are to be quarantined from the effects of emission mitigation requirements due to "carbon leakage". In this context carbon leakage would be coal exports that other countries could provide, if Australia did not. No evaluation of the long term capacity for this to occur has been provided in the Review Reports.

### **Relevant considerations that have been overlooked**

It is true that imposing costs on Australian industry that simply drive polluting industries elsewhere, will have no net effect on global carbon emissions. However coal exporters such as Australia are in short supply and will remain so. This is a rather significant fact to overlook. In the Chapter 4 of Garnaut Review Draft Report, the role of China, high energy prices, resource limits and the number of years till resource exhaustion were all discussed. It may have been assumed in the Review that the geographical distribution of resources is irrelevant. It is not.

Relatively few countries are endowed with large quantities of resources and fewer with large resources per capita. As energy resources become scarce, those countries with high endowments will need to assume greater responsibility to ensure that the reserves are depleted equitably and responsibly. This will be particularly the case for highly polluting resources such as coal. Australia will not be able to evade indefinitely all responsibility for its coal exports, either for the emission consequences, or in terms of global resource management.

The Draft Report observes that depletion of oil and gas may increase greenhouse gas emissions by causing more intensive use of coal, but that coal is considered to be in ample supply. However resource depletion will occur first in countries with high consumption and low per capita endowment. This is particularly relevant for China. Projected Chinese consumption may well deplete most of China's coal reserves by 2030. If China were to then turn exclusively to Australia for its coal supplies, the volume of demand would be sufficient to substantially deplete Australia's coal reserves by 2050. Resource management will be required.

The only other countries with sufficient reserves to supply China are the USA, Russia and India. It is more than likely that these countries would prefer to keep reserves for their own domestic consumption. The Garnaut Review sees global mitigation of emissions as a threat to Australia's economic welfare due to reduced coal export volumes. This view may be overly pessimistic in terms of long term coal prices and neglects the role that Australia may have in influencing these prices. The projections of global coal electricity generation presented in Box 4.1 of the Supplementary Draft Report, which assume either 90% or near 100% carbon capture and storage, are unrealistic.

No doubt the modelling environment in which the research for the Report was conducted included many assumptions as are commonly made in economic theory. Presumably one of

these would be the “small country” assumption, in which Australia is deemed to be a small player and therefore a price taker. In the global coal trade, the small country assumption is not valid. Australia is neither small in market share, nor potentially, in market power. This has been indicated by the price increases of over 100 per cent that Australian coal suppliers have secured this year.

## **Alternatives**

In the Draft Report of the Garnaut Review it was argued that a carbon trading scheme is preferable to a carbon tax as this will limit emissions directly. However alternative energy production will only be economic if the carbon price is high enough. With a pure trading scheme the price may be highly uncertain. In the Supplementary Draft Report a predetermined, rather than market-determined carbon price is proposed. This may be preferable. However if this is to be the case, then the case for a trading scheme, with all its administrative costs and complexities, is weakened, as opposed to a simple carbon tax levied at this rate.

The main policy proposal that should be considered, which is not incompatible with whatever domestic scheme that is adopted, is that a resource rent tax on coal be implemented. This could apply in a similar manner to the resource rent tax on LPG condensate, as applied in the last budget. The tax should apply to coal exports per tonne of carbon, at a rate commensurate with the domestic tax on carbon dioxide emissions.

Most importantly, agreement should be sought with other major coal exporters, of which there is a limited number, to simultaneously introduce such a tax. In order to gain international agreement with this proposal, it must be specified that a proportion of the revenue be paid into a global fund to assist emission abatement, such as the International Adaptation Assistance Commitment, as envisaged in Chapter 13 of the Draft Review.

Where coal importing countries have their own emission abatement policy in place, a rebate of the tax to the importer can apply. This would be a full rebate to the extent that emissions arising from the combustion of the coal are captured and stored. This policy can be adopted now, in advance of the development of global trading schemes and capture and storage technology. It is the only policy where the incentives favour abatement action rather than inaction. This is a suitable policy for the “ad hoc” world that the Garnaut Review laments.

There is no evidence to suggest that the only consequence of higher export prices will be reduced export revenues. Certainly short term elasticities are such that revenues would increase, even if volumes fell. Prices have doubled in the last year, yet volumes have increased. If coal supply constraints ease, or if a global downturn leads to weaker demand, then the opportunity arises for implementation of a tax that would merely have the effect, at least initially, of maintaining traded coal prices at current levels. This would ease international acceptance of the plan.

In the long term geographical limitations on supply will ensure that demand for coal will be sustained at higher prices. A tax, at a low initial rate, can be implemented immediately. Precedents exist in the form of state taxes in Australia and in other countries. Australia however, given its dominant role in the global coal market, has a unique responsibility and opportunity. This is to establish an international adaptation assistance fund in conjunction

with a coal price that sends signal to the world that coal is a polluting resource and that alternatives are needed. This is the appropriate policy for the ad hoc world in which we live.

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