

One Year After The Garnaut Climate Change Review

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- - Briefing Notes - -

1. The Review

(i) The Review saw climate change policy as harder than any other issue of high importance that has come before our polity in living memory. It set out to integrate the parts of a complex story:

- recognising the uncertainty in the science as well as the strong mainstream scientific view that anthropogenic global warming was real, dangerous and urgent;
- recognising that high risks of dangerous climate change were a product of modern economic growth, but that there would be no solution without breaking the nexus between modern economic growth and greenhouse gas emissions;
- requirements of mitigation are more urgent than supposed, for example, by the Stern Review and the IPCC, because of the high rates of emissions growth led by the large developing countries in the early twenty first century;
- the only solution was global and yet each substantial country would have to accept constraints, and Australia would need to play its full proportionate part.

(ii) The Review provided evidence that it was in Australia's national interest for there to be an ambitious global mitigation effort in which Australia played its full proportionate part. That pointed to concentrations of greenhouse gas emissions at or below 450 ppm of carbon dioxide equivalent, for which Australia's proportionate part would be a reduction of emissions levels by 25% from 2000 levels by 2020, and 90% by 2050.

- Australia would be damaged more than any other developed country by unmitigated climate change;
 - There were uncertainties from the science but rigorous analysis demonstrated that this strengthened rather than weakened the case for strong, early mitigation;
 - Rigorous statistical analysis showed that the warming trend of the second half of the twentieth century had continued through the years so far in the twenty first century.
- (iii) If pursued with effective policies and within the framework an effective global agreement, Australian GNP growth would be one to two tenths of one percent per annum below what it would otherwise have been in the first half of this century, and correspondingly higher in the second half of the century, taking into account only measurable monetary effects. The benefits would grow much more rapidly than the costs after this century. Even if only conventional economic effects based on the medians of the probability distributions of outcomes were taken into account, when appropriate discount rates were applied, there were net gains from mitigation this century and larger net gains with stronger mitigation ambitions. Taking into account longer-term impacts, uncertainty (and therefore the possibility of much worse outcomes) and non-monetary values (environmental amenity, longevity, health) made the case for strong mitigation overwhelming.
- (iv) To minimise the costs of mitigation, a market based instrument should be used to place a price on carbon and other greenhouse gas emissions, and public support should be provided for research, development and commercialisation of new, low-emissions technology;
- an emissions trading scheme with all emissions entitlements sold by auction, regulation at arms length, from political government, wide opportunities for inter-temporal and international trade in entitlements would be the most efficient way of placing a price on emissions in Australia;

- the preference for an ETS over a carbon tax in Australia was an ‘on balance’ decision, taking into account continuity with earlier Australian and international discussion, the environmental and economic benefits of international trade in permits and certainty of achieving environmental objectives. A carbon tax would have some merits, including lower administrative costs, and could be the preferred means of placing price on carbon in some countries including many developing countries;
 - sellers of emissions-intensive goods and services into the domestic market would pass on more or less the full cost of permits to consumers. This justified half of the value of permits being returned to low- and middle- income households in ways that did not blunt the price incentives to economise on use of high-emissions goods and services;
 - trade-exposed emissions-intensive producers could not pass on the costs of permits, pending other countries having comparable pricing of carbon. There would be no problem once all major countries had accepted limits on emissions – even if the limits were determined in very different ways in developed and developing countries, with trade in entitlements generating similar prices in all substantial countries. In the meantime, transitional support for trade-exposed industries was justified, in the form of payouts which filled the gap between current product prices and prices that would prevail if other countries had similar carbon pricing
 - about 20 per cent of permit value should be allocated to public support for research, development and commercialisation of new, low-emissions technologies.
- (v) The key to successful mitigation was an effective global agreement. One possible agreement would have three elements:
- allocation of entitlements across countries on the basis of convergence towards equal per capita entitlements by 2050;

- high income countries to commit to high, minimum public expenditures to support technological innovation, some of which would be deployed in developing countries;
- developed countries to provide assistance to developing countries for adjustment to climate change.

2. Responses to the Review

- (i) The Final Report was presented to the Prime Minister, Premiers and Chief Ministers on the morning of the biggest ever points fall on the New York Stock Exchange. The discussion of the Review has been entirely against the backdrop of the Great Crash of 2008 and the Great Recession which followed.
 - the Great Recession temporarily and briefly stopped the growth of global emissions. This is not material in the sweep of history.
 - With unemployed resources, investment in structural change had lower costs. Many countries, including the USA and China, made a major place for investment in emissions-reducing structural change in their stimulus packages.
 - The political economy of mitigation became more difficult, with rising unemployment providing a congenial environment for support for established industries.
 - Overall, the elections of new governments committed to stronger mitigation in the USA and Japan, the strengthening of old governments in India and Indonesia, and strong community support for action has prevented a general international retreat on mitigation in the year since the Great Crash.
- (ii) The approaches to the science and the uncertainty to the science put forward by the Review seem to have been influential.
 - Australia's national interest is a strong global agreement with Australia's part being to reduce emissions entitlements by 25% from

- 2000 levels by 2020 has been accepted by the government, the opposition and many community interests. The Prime Minister has indicated willingness to seek a mandate at the next election to tighten old 2050 targets from 60% to larger reduction.
- Some environmental groups have wanted stronger mitigation with more ambitious goals than 450 ppm but any path to them must first secure 450 ppm after some overshooting and then go lower. There is a danger that the best has become the enemy of the good and the friend of the bad.
- (iii) The approach to compensation for low-income households has been widely accepted by the government and has not been controversial but compensation to businesses has followed different lines.
- Substantial commitments, almost four billion dollars have been made to electricity generators, in my view without justification, but moderate compared with unreasonable expectations allowed by the previous government and state energy departments.
 - The absence of principle in payments to trade-exposed industries for the temporary period in transition to effective global mitigation has led to arbitrary distribution, probably to over-allocation on average, to the absence of an expectation of or process for early phasing out as others move to stronger mitigation and to the ugliest ‘money politics’ we have seen for a generation.
 - And the transitional nature of the assistance has been lost, leading to the absence of thought to investment for the low carbon world economy of the future.
- (iv) The pre-emption of permit revenue for other uses is one of the reasons why there has been relatively little support for the innovation in low-emissions technologies.
- There has been much criticism of the substantial support for CCS technologies.

- The problem is not the support for CCS, but the absence of support for innovation in other technologies in which Australia has comparative advantage in research, large economic interest, and which are potentially transformative for the global mitigation effort.
- (v) Chapter 22 of the report has succeeded in raising the profile of biosequestration.
- The Review's presentation, based on a survey of existing literature, indicated great potential. The recent CSIRO report for the QLD Government has underlined that potential.
 - As with CCS, only more so, Australia has comparative advantage in research and strong national interests in its success, and success is potentially transformative for the cost of the global mitigation effort.
 - Australia has a major role to play in research on measurement of the biosequestration effects, in development of new biosequestration technologies, and in reforming the global regime.
- (vi) There has been much argument amongst Australian economists about the efficiency of various carbon trading instruments. The discussion has been on second order issues compared with other values at stake.
- There has been a tendency to compare an ideal carbon tax with a flawed ETS – when a carbon tax in practice would be subject to similar political economy pressures for exemption.
 - There has been a tendency, not discouraged by the Government, to focus on the flaws of the transition period, rather than on how the scheme will work with participation from all substantial economies.
- (vii) The international regime proposed by the Review has held up well to the international discussion.
- Debate in India and China has focused on the date at which convergence to equal per capita entitlements occurs and to the

parameters of developed country support for new technologies and adaptation.

- There is growing acceptance in China that the Review's formula for Chinese participation in a global regime is consistent with attainable Chinese policy objectives.
- (viii) While the ETS as proposed by the Government has many weaknesses, it is likely that changes to facilitate support in the Senate would exacerbate rather than ameliorate weaknesses.
- One main exception would be stronger measures to support innovation related to biosequestration.
 - Another would be explicit arrangements to phase out assistance to trade-exposed industries as other countries strengthen their mitigation efforts.
 - Otherwise it is to hoped that the ETS can be passed quickly, if necessary in a joint sitting, pruned of its design thorns as it becomes clear that a major global mitigation effort is underway.