Minority Report by Senator Nick Xenophon

1. Background: nature of the problem that we are trying to solve

- 1.1 Anthropogenic climate change presents us with the most pressing and complex policy problem that we have faced. It is pressing because the window of opportunity in which we have to take the sort of abatement action needed to avoid irreversible, dangerous and potentially catastrophic climate change is small; and, on the basis of the findings from last month's conference in Copenhagen, is getting smaller. It is complex because it has all the features that policy, whether at a global or national level, usually struggles to deal with. These include the fact that abatement has large upfront costs, with benefits that accrue in a relatively distant future and with some degree of uncertainty; the need to provide for the development aspirations of poorer countries and the emissions trajectories entailed by these; the uneven spread across the globe of net benefits from abatement; and the potential for 'free rider' issues created by the fact that no one country stands to gain from abatement efforts in the absence of concerted action. These last two issues create what Professor Garnaut has accurately characterised as a diabolical prisoner's dilemma problem.¹
- 1.2 This overall context must inform the design of an emission trading scheme in a country like Australia with its small, open economy. There is a sensible policy case, as well as a strong ethical one, for Australia to take early emissions reduction action in order to break the potential deadlock created by the prisoner's dilemma and uphold the sort of global co-operative agreement required to address global climate change. We need to be clear that the brutally honest position is this: in the short to medium term the success of our domestic policy (indeed, of all advanced countries) will be a function of the ability to get all countries (notably the large emitting developing countries) on board, without which there will be no prospect of addressing climate change. ²

¹ Garnaut, R., *The Garnaut Climate Change Review: Final Report*, (2008) Commonwealth of Australia, pp287-290

² The imperative of global action, particularly for poorer countries, is underlined by David Wheeler in *"Another Inconvenient Truth: A Carbon-Intensive South Faces Environmental Disaster, No Matter What the North Does"*, Center for Global Development, Working Paper Number 134, December 2007. Wheeler's modelling suggests that even if rich countries emissions were reduced to zero, current emissions trends in poor countries would still place the world on course for serious climate change impacts.

1.3 In taking such action, Australia needs to adopt a scheme that is credible internationally and sustainable domestically. International credibility will be to large extent a function of the abatement targets Australia sets for itself. Domestic policy sustainability is to a large extent a function of adjustment costs, particularly in the short to medium term when there are likely to be significant gaps in emission reductions efforts globally. Policy sustainability has an economic dimension – imposing large adjustment costs on the economy with no prospect of incremental global abatement gain is simply not an efficient economic proposition. And this impacts on the political dimension of policy sustainability by eroding support for emissions reduction, particularly in a time of economic uncertainty.

2. What are the policy issues that should govern the design of a carbon pollution reduction programme?

- 2.1 Given this particular background, what are the particular issues to consider as important in designing a carbon reduction programme?
- 2.2 Clearly the overarching goal is **environmental** the abatement of greenhouse gas emissions. This is largely contingent on establishing the appropriate incentives to bring about substitution in production and consumption from emissions intensive goods and services to ones that are less so, and to prompt behavioural changes in consumers and producers. Abatement will, fundamentally, be investment driven. Firms will need to invest in a variety of activities whether in R&D, in implementing new process or selling different goods and services as they respond to changes in input costs, relative prices and changes in consumer demand.
- 2.3 The second set of issues consists of **adjustment issues**, which impact directly on the issue of domestic policy sustainability discussed previously. Adjustment issues range from the income effects on households stemming from the introduction of a price on carbon, to the impact on asset values of what the government has called 'strongly affected' firms. Issues related to carbon leakage and the loss of competitiveness are adjustment issues that relate directly to the global nature of the abatement task and the prospect that, in the short to medium term, countries like Australia will be implementing emission reductions ahead of others.
- 2.4 **Carbon leakage and competitiveness** cut to the heart of both the economic and political dimensions of sustainability. While the political is often emphasised, it is important to underscore the economic efficiency aspects of both these issues

too. Carbon leakage is a net cost to the global economy – it imposes adjustment costs with little or no return in terms of global abatement. Competitiveness losses can also be a global cost (and not just specific to Australia) as well. This will arise if carbon reduction schemes cause the relocation of activity away from Australia, when that activity would have been located in Australia had there been a concerted global effort to reduce emissions. The implication is that the introduction of a price of carbon in some countries but not in others will cause a distortion to the global allocation of production along lines of comparative advantage.

- 2.5 The third set of issues consists of **governance issues**. These include the potential for policy capture. Capture could manifest itself in a number of ways including: manipulation of the scheme parameters and its implementation; or manipulation of some other area of government policy (such as trade policy) in response to the effects (or supposed effects) of the carbon pollution reduction scheme.
- 2.6 Given these policy issues, a carbon pollution reduction scheme will be judged on the grounds of whether it is:
- effective in managing these different concerns, and any trade- offs between them;
- efficient in managing these concerns at least cost;
- ethical in terms of managing various equity and distributional issues that are raised by these concerns.

3. Critique of the CPRS and government approach

3.1 <u>A weak target</u>

3.1.1 Against this backdrop is a critique of the government's approach as set out in the CPRS. Perhaps the most commonly heard criticism of the scheme is the overall target range of 5-15% that has been set. That target range is largely a reflection of the adjustment costs that may be expected, but also of the peculiarly high cost nature of the scheme that has been chosen. In respect of the former, it is likely that the government's own modelling has understated the costs, in the short to medium term, of adjusting to a carbon price. This in turn is a reflection of the fact that the type of Computable General Equilibrium (CGE) model uses a full employment rule as it closure rule - that is, the economy is always at or near full employment levels, and responds to a shock almost immediately. In other words,

for example, retrenched workers in the Pilbarra or in Newcastle become insurance agents in Melbourne or Sydney overnight. Clearly, this is unrealistic, and while the full employment rule and its consequent results can be a useful guide to what happens in the long term, it simply assumes away some of the most pressing policy problems in the short term. Indeed, it is quite likely that the Government is aware of the limitations of its modelling and has thus chosen a cautious approach as a consequence.

- 3.1.2 Setting aside issues of modelling, concerns regarding adjustments costs are also warranted on account of the high cost nature of the cap and trade mechanism within the CPRS, as compared to alternatives. This point is explained in further detail below when intensity-based approaches are discussed. The main issue is that the cap and trade approach essentially acts as a penalty-only mechanism: it penalises all emitters as a function of their emissions intensity, but offers no direct reward to firms that cut emissions.
- 3.1.3 If we marry the high cost aspect of the scheme design to concerns about adjustment that may not be captured in the modelling, then a relatively modest target range is a predictable outcome. It does, however, raise the question as to whether a more ambitious target could be adopted if an alternative scheme design were available that would be more attractive in managing adjustment concerns because the scheme has lower cost properties. This would be desirable from an environmental perspective, and in terms of sending a more credible signal internationally (recalling here that the overarching objective sought through the early implementation of a carbon reduction scheme is to sustain a co-operative international agreement).

3.2 Not one but many schemes

3.2.1 The CPRS is a combination of several mechanisms and initiatives. Ostensibly, its central feature is a cap and trade mechanism, though it would be more appropriate to refer to it as a "quasi-cap and trade" mechanism. Under a standard cap and trade scheme, the quantity of emissions is fixed and the cost of emissions (i.e. the price of permits) is allowed to vary. In the case of the CPRS, this fixed quantitative restriction is relaxed. If the permit price reaches a certain level (\$40 per tonne), the government will issue an unlimited number of permits – as Richard Denniss put it in a recent presentation, the government will start printing permits as if it were the central bank of Zimbabwe printing cash.³ The price cap, as well as banking and borrowing provisions and gateway provisions

³ Parliamentary Library Vital Issues Seminar, "*Carbon tax and emissions trading*", 17 March 2009, audio available at: http://www.aph.gov.au/library/pubs/vis/index.htm

that provide flexibility for the government to adjust the overall targets in the light of prevailing circumstances reflect a concern on the part of the government both to cap the overall costs of the scheme, and to limit volatility in prices. This in turn is motivated by a concern regarding the adjustment impact of permit price rising to higher than expected levels, and an acknowledgement that untrammelled volatility in permit prices is undesirable because of the investment uncertainty this generates.

- 3.2.2 **Mitigating the transitional adjustment impact** of emissions trading also provides a central motivation for revenue recycling, which under the CPRS would be undertaken through transfers to households and through tax offsets on transport. The transfers are mainly motivated on equity grounds, and specifically to offset the regressive income effect that the introduction of emissions trading can have through various channels (such as higher electricity prices).
- 3.2.3 The proposals for emission-intensive, trade exposed (EITE) industries differ significantly from other approaches to managing transitional issues. The method of permit allocation, which is tied to production and linked to an emissions intensity benchmark has strong affinities with the intensity based approach discussed below. The main difference, as we shall see, is that while with normal intensity based approaches, activities receive a net subsidy to the extent that they emit lower than a specified benchmark, under the EITES proposals activities will receive shielding (i.e. an implicit production subsidy) to the extent that their emissions intensity exceeds a certain benchmark. It is important to emphasise that under a cap and trade scheme, attempts to address competitiveness issues and carbon leakage by shielding firms from the cost of emissions must necessarily take the form of either a cash subsidy tied to production or a free permit allocation tied to production. An approach based on the former was recommended by Professor Garnaut, while the CPRS chose the latter route. Some of the drawbacks with the particular approach chosen by the CPRS are discussed below, but at this juncture the important point to note is that the proposals for the EITES involve a scheme that runs along qualitatively different lines to the central cap and trade mechanism.
- 3.2.4 The CPRS also includes as yet undeveloped proposals regarding **energy efficiency.** This is almost certainly likely to mirror "white certificate" schemes elsewhere and follow a baseline and credit approach, which again is substantially different to the cap and trade mechanism contemplated for the emissions trading proper.

3.2.5 Though not part of the CPRS itself, the proposed **MRET** will also follow a baseline and credit approach, in keeping with green certificate schemes found in other jurisdictions.

4. Commentary on the complexity of the CPRS

4.1 The CPRS is therefore a complex assemblage of different mechanisms. To some extent, all proposals for carbon reduction in a small open economy like Australia will have a degree of complexity. This simply stems from the wider, global context in which such schemes are implemented. Inevitably, reconciling the imperative for credible early action and domestic policy sustainability – through the management of adjustment issues – leads to multiple policy concerns and hence the need for multiple objectives. This is all the more true if the core of the reduction scheme is a particularly high cost proposal, as embodied by the CPRS. The critique that may be offered of the CPRS is that it selects instruments that are ill suited to the wider policy context in which they are implemented, and to managing the policy concerns that stem from this.

5. Drawbacks of the CPRS vis a vis objectives sought

5.1 Environmental objectives

- 5.1.1 The CPRS does not perform well even on the one issue where it is often touted as having a clear advantage over other approaches – namely in providing certainty in the quantity of emissions reduction. For reasons already explained, the various safety valves included in the scheme preclude it from offering such certainty; or at least, what certainty there is exists only up to a certain point in circumstances when the demand for abatement exceeds projections. In this respect, the cap and trade proposal is not substantially different to an intensity based approach or a tax, both of which allow for flexibility in emissions if the demand for abatement exceeds projections.
- 5.1.2 Moreover, the flexibility in the quantity of abatement under the CPRS is asymmetric the cap loosens after a certain point on the upside when demand for abatement exceeds projections, but does not tighten if the demand for abatement undershoots projections (due to lower than expected emissions growth resulting, for instance, from economic growth that is lower than trend levels or because unanticipated abatement having taken place e.g. through household initiatives). This is the much publicised issue of "additionality" that has been given a considerable degree of attention, and which means that under the current

CPRS, the billions of dollars injected into funding insulation would lead to no additional abatement, but would rather shift the overall contribution made to abatement from large emitters to households. The issue of additionality is not unique to the CPRS, but arises in all cap and trade schemes where targets are weak. Indeed, this has led to calls for governments to intervene by putting a floor on carbon prices through periodic revisions of the overall cap – a form of intervention that is tantamount to converting the scheme into an intensity based approach.

5.1.3 In contrast to the CPRS proposal, intensity based measures and carbon taxes lead to a tightening of the cap when emissions undershoot expectations. This allows for a greater degree of smoothness in the carbon price which in turn will provide a better basis for investment decisions including green industries and cleaner energy production. Indeed, the CPRS seems to have captured the worst of all worlds: it is a high costs scheme that, in attempting to contain those costs does away with the feature (certainty in reductions) touted as its greatest asset. Moreover, the asymmetrical nature of this modification removes any possibility of additionality abatement, a feature that has prompted calls for governments to intervene through target revisions.

5.2 EITES

- 5.2.1 There are several drawbacks to the approach used to handle EITES. Generally speaking, the government is correct to avoid using border measures such as tariffs and border tax adjustments, as these would be complex to administer, inefficient, and almost certainly in contravention of global trade rules. The use of production subsidies would also be litigious from a WTO perspective to the extent that they are specific to certain firms and contingent on export performance and/or on the use of domestic inputs. The CPRS has got around that problem, on paper at least, by making its system of subsidies ("shielding") contingent on emissions intensity but this in turn raises other problems.
- 5.2.2 For a start, the granting of subsidies subject whether to an activity is in excess of a certain emissions threshold is perverse from an abatement view-point. Granted, the CPRS legislation does away with the problem that might have existed under the Green Paper proposals, namely that firms might be penalised if they cut emissions because they would drop below the threshold at which shielding was triggered. However, the proposals still mean that those firms that have been relatively efficient prior to the cut off date for measuring the emissions intensity thresholds are not rewarded for their efforts, which can have adverse dynamic efficiency consequences going forward.

5.2.3 A second issue is that the decision to selectively shield more emissions intensive firms or activities increases pressure on those less intensive trade exposed ones that are not shielded. This is not simply because they do not receive the financial benefit subsidies. A more fundamental issue is that for these firms, the shielding approach acts very much like a real exchange rate appreciation that is imposed specifically on them. To see this, consider that the introduction of a price on carbon will inevitably increase the price of non-tradables relative to tradables (that is, the real exchange rate will appreciate). This is because tradable sectors are able to pass on the costs of the carbon price to a much greater extent than non-tradables given that the latter are essentially price takers. The introduction of shielding essentially carves out a sector of the tradables sector – the more emissions intensive – and protects them from the effects of this appreciation. But this simply means that the competitive impact of the price of carbon will fall more heavily on less emissions intensive activities. In particular, there will tend to be a shift in resources and factors of production away from these sectors to shielded sectors and to non tradables. In this manner, the shielding approach is as much a tax on less emissions intensive activities as it is a subsidy to the more emissions intensive ones. In effect this creates disincentives for resource allocation towards activities that should on balance be promoted. Moreover, it is entirely possible that the disadvantaged sectors will seek relief through other avenues of policy, such as trade policy. This in turn can create further distortions that accentuate economic costs, and create trade tensions that pose an obstacle to securing the type of co-operation required to sustain a global agreement on climate change mitigation.

5.3 Governance issues

5.3.1 The administration of adjustment assistance through transfers, and more generally, the administration of permit revenues, raise a number of governance issues. For a start, the fact that revenues are required to mitigate the regressive impacts of the scheme on income distribution means that at least some of the double dividend (which could have been reaped through the use of permit revenue to cut distortionary taxes on labour and investment) will be foregone. Secondly, the administration of such transfers in a manner that does not affect consumption decisions is likely to be, at the least, problematic. A more general issue is that the large amounts of cash that will transit through government coffers raise all manner of possibilities for wasteful recycling. The modelling of scheme effects implicitly assumed that all recycling is done perfectly efficiently, and without creating any costs through distortions. This is unlikely to be the case. Indeed, experiences with government spending over the last few years

suggest that governments are particularly bad at identifying socially optimal forms of spending.

6. Summary observations on the CPRS

- 6.1 In sum, the CPRS as it stands is ill equipped to initiate sustainable domestic reform in the realm of climate change policy. In particular, it presents a high cost approach to reform that creates various transitional adjustment issues. These have not been fully addressed in the economic modelling, and to the extent that they have been countenanced, have led to a variety of adjunct measures that (i) undermine the scheme's own aspirations to provide certainty in emissions reductions (ii) add various layers of complexity, notably through approaches to EITES and the recycling of auction revenues, that are conducive to serious economic distortions and problematic governance issues.
- 6.2 There is significant scope to build on the work done to date and improve the current design of the scheme. The Select Committee on Climate Policy should shed further light on alternative approaches.

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