Chapter 10

Markets for carbon permits

Permits auctions and trading

10.1 The auctioning of permits should mean that permits are allocated to those who value them most and aid price discovery. Permits will be auctioned monthly, a compromise between weekly auctions which would give more frequent price information and quarterly or annual auctions which would provide more depth as there would be more bidders at each auction.[1] The Government is continuing to consult with industry over whether any deferred payment arrangements will be allowed, but any such arrangements will be limited. The first auction is expected in early 2010.[2] In addition to the monthly auctions for the current vintage, there will be annual 'advance auctions' of three future vintages. This is a balance between the view that auctioning long-distant permits gives investors a stake in the longevity and credibility of the scheme and concerns about complexity and potential lack of liquidity in auctions of distant vintages.[3] The only restriction on participation in auctions will be lodging of a security deposit. The Government rejected some calls to prevent 'speculators' being able to bid, as it wants the deepest possible market with fair access to all.[4]

10.2 'Ascending clock' auctions will be employed. This works as follows:

> …the auctioneer announces the current price. Bidders indicate the number of permits they are prepared to purchase at that price. If demand exceeds supply, the auctioneer raises the price in the next round and bidders resubmit their bids. This process continues until the number offered is equal to or greater than demand. Bidders then pay the price from the previous round.[5]

10.3 The 'ascending clock' auction provides information on the aggregate demand schedule. For the first couple of years, those receiving free permits will also be able to sell them as part of the auctions, resulting in 'double-sided auctions'. These will only be allowed for a limited period to avoid it hindering the development of a secondary

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1 Strictly, the proposal is for twelve auctions per financial year; *CPRS Bill Commentary*, p 112.

2 The Government's aim is to hold at least one auction before July 2010; *CPRS Bill Commentary*, p 19.

3 *White Paper*, pp 9-17 to 9-21.

4 It also points out that in practice excluded entities could just arrange with eligible entities to bid for permits on their behalf; *White Paper* p 9-22.

5 *White Paper*, p 9-23.

market.[6] Bidders will be restricted to a maximum purchase of 25 per cent of the permits sold at any auction. With there being 16 auctions (monthly for a year plus the advance auctions), this restricts purchases at any single auction to 1.6 per cent of total permits of a given vintage. As the largest single entity is expected to account for around 3½ per cent of emissions, it would be able to meet its requirements over three auctions.[7]

> It is important that the permits are tradable. This should ensure that the emissions cap is produced with least cost to the Australian economy. Permits will be designated as 'financial products' so the market for them will come under the aegis of ASIC.

Upper limit on permit price

10.4 The ceiling will be $40 a tonne, rising by 5 per cent a year in real terms, for the first five years. This will be implemented by the issuance of additional permits as required. Its use is controversial as it increases the risk that Australia will either not meet its emission reduction targets or taxpayers will be forced to incur an uncertain cost of buying international permits and makes it harder for the Australian scheme to be linked to overseas schemes.[8]

10.5 Dr Betz, an expert of European emissions trading, also believes the limit is too low:

> …a price cap risks environmental integrity… It shifts the risk to the taxpayer … The risk might be even greater if the potential is there that you can indirectly bank those credits into the future—what is currently allowed under the scheme and which cannot really be prevented. So you will have the circumstance of not having achieved your cap being imported into future periods. The proposed $40 in the draft legislation, which is growing slightly, might also be too low because we have seen international carbon prices at around $60 and we have seen high volatility. So having a price above $40 internationally is not unlikely.[9]

Derivatives markets

It is anticipated that markets will develop, not just for the permits themselves, but derivatives markets as well, which should aid in 'price discovery', and so improve allocative efficiency.[10] Already the Australian Stock Exchange is saying:

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6 *White Paper*, p 9-27.

7 *White Paper*, p 9-28.

8 This view was put in submissions on the Green Paper by, for example, BP Australia and environmental groups; *White Paper*, pp 8-33, 34.

9 Dr Regina Betz, *Proof Committee Hansard*, 27 March 2009, p 117.

10 *White Paper*, p 8-1 to 8-3.

> Once sufficient detail of the ETS is known, ASX will be able to introduce a futures market for emissions prior to the issuance of emission permits to help industry participants manage risk. Development is well under way .[11]

Committee Comment

The Committee welcomes the development of derivatives markets but expects that they will be subject to appropriate prudential supervision.

International linkages

10.6 As noted above, climate change is a global problem requiring a global solution. A benefit normally attributed to emissions trading schemes is the scope they provide for international trade in abatement. This allows emissions reductions to be achieved at lower overall cost.

10.7 International linking also provides a mechanism for channelling carbon financing to developing countries. This has helped to promote developing country engagement on climate change, as well as their confidence and capacity to develop more cleanly.

10.8 Mr Paul Curnow, a partner in the global climate change practice of the international law firm of Baker and McKenzie told the committee:

> Global warming is an international problem with global causes and consequences. One tonne of CO_2 emitted anywhere in the world has the same cumulative effect as another tonne emitted somewhere else. Similarly, one tonne of CO_2 reduced anywhere in the world has the same cumulative benefit as another tonne reduced anywhere else in the world.
>
> This is why global action is imperative on climate change and imperative in the context of Australian implementing its own scheme.
>
> Allowing linking between schemes is the way in which governments and businesses will be able to build up global action and, importantly, this linking of schemes allows the global community and Australia to reduce emissions most efficiently and at least cost.[12]

10.9 Professor Garnaut argues strongly in favour of international carbon trading:

> It would be neither desirable nor feasible for each country separately to pursue national emissions-reduction targets. It would not be desirable because lower-cost abatement options would be forgone, and higher-cost options accepted. It would not be feasible, for there would be no financial

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11 Rob Elstone, Chief Executive Officer, Australian Stock Exchange, cited in *Australian Financial Review*, 30 December 2008, p 29.

12 Mr Paul Curnow, Proof Committee Hansard, 27 Mrach 2009, p, 16.

> incentive for developing countries to participate in strong mitigation, and they would not do so. These are two fatal flaws.[13]

10.10 A contrary view was put by Professor McKibbin:

> The reason you have international trade is, if your costs in this country are higher than costs abroad, you pay people in other countries to do the abatement and bring the permit to Australia. We can do the equivalent here by having the government, through a central bank of carbon, provide the short-term permit to cap the price and then, over time, adjust to reduce emissions in the future that were temporarily injected into the economy in the short term. I would rather do that domestically, through national institutions and national monitoring and enforcement, than do it through international institutions, which we do not even understand very well in terms of the CDM and other mechanisms and which are not run in our jurisdiction. We are allowing assets from offshore to affect the price of carbon in our economy, which can be advantageous but which can also be very disruptive. I think that is an element of uncertainty that we do not need. We can manage that, as we manage our domestic interest rates, independently of the shocks that are occurring in the rest of the world.[14]

10.11 The Government has identified development of international carbon markets as a strategic priority.

> An effective global carbon market will play a key role in developing effective international solutions to climate change by fostering least cost global abatement. Contributing to a robust international carbon market should therefore be seen as a strategic priority for Australia.[15]

10.12 Unrestricted linking may also assist Australia to become a regional hub for carbon trading.

Use of international units

10.13 The CPRS will not restrict firms' use of Kyoto units to meet scheme obligations. This will have implications for the price of Australian carbon pollution permits and the overall cost of the scheme. With unrestricted linking, the price of an Australian permit will be set by international carbon markets. Australia, being a relatively small emitter, is likely to be a price taker; that is, Australia will have little impact on world prices for carbon.

10.14 Even with unrestricted international linking, most abatement will occur domestically as there are very significant low cost abatement opportunities in Australia.

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13 Garnaut Review, p 217

14 Professor Warwick McKibbin, *Proof Committee Hansard*, 25 March 2009, p 98.

15 *Green Paper*, p, 219

> …the Treasury modelling indicates that over half of emissions reductions occur domestically within Australia and not all of it is imported from overseas. [16]

> Where would Australia end up in such a scheme? We are looking a long way forward to the middle of the century. That depends a lot on things we do not know about the possible success of biosequestration in Australia. If that is very successful, that may turn out to be a relatively low cost way of reducing emissions or absorbing emissions, and that might make us an exporter of permits.[17]

10.15 Evidence from the finance sector and industry was strongly supportive of the scope to purchase abatement internationally. For example:

> International linking can reduce domestic abatement costs by opening up more opportunities for abatement, which may not be available domestically. It may also enhance price discovery through deeper and more liquid markets providing a closer estimate of an international abatement price.[18]

10.16 In the *White Paper*, the Government:

> ..acknowledges the overwhelming support of stakeholders for linking and recognises the benefits of linking in providing low-cost compliance options for liable entities and in supporting an efficient global response to climate change.[19]

10.17 This view was supported by Professor Garnaut:

> I think international trading permits are going to be absolutely essential to get the participation of any of the developing countries. [20]

10.18 As linking reduces the price of pollution permits, some renewable energy firms that stand to benefit from a higher domestic carbon price may be opposed to international carbon trading. On the other hand, international carbon trading creates market opportunities for such firms in developing countries. Cool NRG is an Australian renewables company delivering abatement projects in developing countries under the Kyoto Protocol's Clean Development Mechanism:

> Cool nrg supports the international linking of the CPRS to the CDM as outlined in the legislation. The linking allows Australian companies to access bona fide and lowest cost emission reductions from developing

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16 Dr Martin Parkinson, Secretary, Department of Climate Change, *Proof Committee Hansard*, 18 March 2009, p 13.

17 Professor Ross Garnaut, *Proof Committee Hansard*, 23 March 2009, pp 53-4.

18 Australian Chamber of Commerce and Industry, Submission 124, p, 13.

19 *White Paper*, Chapter 11, p, 3.

20 Professor Ross Garnaut, *Proof Committee Hansard*, 23 March 2009, p 54.

> countries – reductions that contribute to sustainable development and the UN adaptation fund.[21]

10.19 The committee heard some criticisms of international linking. Dr Richard Deniss used familiar 'mercantilist' arguments against importation of permits:

> By relying on importation of permits, we will literally be exporting jobs in the energy efficiency and abatement industry. There is an idea that it is somehow costless to the Australian economy to continue to pollute and just buy in lots of permits.
>
> The fact is: if we instead worked harder to reduce emissions here in Australia and indeed did not have to import so many permits from other countries, by definition there would be far more jobs in the energy efficiency and abatement industries here in Australia. Importing permits is exactly the same thing as exporting jobs, an issue that does not seem to have been much considered.[22]

10.20 Dr Betz, director of the University of New South Wales' Centre for Energy and Environmental Markets, commented:

> In the Marrakesh Accords, for example, it states that domestic action shall thus constitute a significant element of the effort made by each party. So my question is: when Australia is allowing unlimited use of CDM and JI credits in their scheme, which is covering about 70 per cent of emissions, how can they demonstrate that they do something domestically? It might be interpreted by other countries that there is a lack of willingness by Australia to do its fair share of emissions reductions domestically.[23]

10.21 The Department of Climate Change gave evidence that prohibiting the use of international units would be simple but would increase the carbon costs under the CPRS:

> It is very easy to prohibit any imports of permits, but you have to understand that a consequence of that is that it drives up the cost of abatement in Australia quite significantly.[24]

Credibility of international units

10.22 There is concern about the integrity of foreign schemes. A number of witnesses referred to these concerns:

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21 Cool NRG, *Submission 52*, p, 1.

22 Dr Richard Deniss, The Australia Institute, *Proof Committee Hansard*, 25 March 2009, p, 76.

23 Dr Regina Betz, *Proof Committee Hansard*, 27 March 2009, p 117.

24 Dr Martin Parkinson, Secretary, Department of Climate Change, *Proof Committee Hansard*, 18 March 2009, p 13.

> … clean development mechanism…there is a difficulty in reliably establishing that the claimed offset is in fact a reduction compared with what would have happened otherwise.[25]

10.23 Parties to the Kyoto Protocol have gone to considerable effort to create administrative arrangements and technically sophisticated methodologies for establishing the credibility of credits created under the Clean Development Mechanism. Emissions estimation methodologies must be internationally approved and all abatement credited must be audited by an accredited, independent third party.

10.24 The committee recognises that efforts to improve the credibility of international units are ongoing. The committee notes the Government's conclusion in the *White Paper* that:

> The use of Kyoto units in the Scheme is consistent with Australia’s Kyoto Protocol obligations, and the Government considers that the Kyoto Protocol establishes a robust and credible framework for mitigation.[26]

Sale of abatement

10.25 To reduce implementation risks, the export of Australian permits will not be allowed. When allowed, exports of permits to international markets and other countries will be achieved either:

- by allowing permit holders to convert a carbon pollution permit into a Kyoto unit for subsequent sale and transfer to international markets

or

- by allowing the direct transfer of permits, where a bilateral link with another country’s Scheme is established and there is an agreement that a shadow transfer of international units will occur at the government level.

10.26 Export of pollution permits would only occur if the cost of abatement internationally were higher than that in Australia. Given the low-cost abatement opportunities likely to be available in developing countries, this situation seems unlikely. This restriction is, therefore, unlikely to have material affect on the carbon price in the CPRS.

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25 Dr Frank Jutzo, *Proof Committee Hansard*, 19 March 2009, p 32.

26 *White Paper*, Chapter 11, p, 10.