Chapter 3

The international trading of carbon emission permits

Introduction

3.1 This chapter discusses the short comings of international carbon markets. The experience of international markets is important because of how the Government's proposed scheme will transition from a fixed price on carbon to a flexible price under an Emissions Trading Scheme (ETS) on 1 July 2015.[1] From 1 July 2012 to 30 June 2015, the carbon price will be set by the Australian Government. After 1 July 2015, the price will become flexible, largely determined by the market. The proposed scheme will allow up to 50 per cent of permits to be imported from ETSs overseas, therefore, it is important that these schemes be trustworthy.

3.2 Current experience in overseas jurisdictions appears to show that credible, stable and reliable mechanisms to facilitate the international trade in permits are not emerging. This raises serious questions about the reliability of the Treasury's modelling and the actual operation of the proposed Australian regime from 1 July 2015, which draws so heavily on overseas abatement to offset Australia's domestic emissions.

3.3 During the flexible price period, which commences on 1 July 2015, the Treasury's core policy scenario involves up to 50 per cent of all carbon permits, with some restrictions, being sourced internationally up to 2020, when the prescribed amount will be reviewed by the Climate Change Authority.[2] These permits will be sourced from 'credible international carbon markets'.[3] The committee thinks the concept of 'credible' markets is an important issue to clarify.

3.4 In a public hearing held by the Joint Select Committee on Australia's Clean Energy Future Legislation, the Secretary of the Department of Climate Change and Energy Efficiency listed the schemes which he envisaged Australia's ETS linking with at the beginning of the flexible price period. They were the European Union Emissions Trading Scheme (EU ETS), the Kyoto Protocol's Clean Development

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1 Clean Energy Bill 2011, *Explanatory Memorandum*, p. 123.

2 Department of the Treasury, 21 September 2011, *Strong Growth, Low Pollution: Modelling a Carbon Price - Update*, p. 6, http://www.treasury.gov.au/carbonpricemodelling/content/update/downloads/Modelling_update.pdf, (accessed 26 October 2011).

3 Clean Energy Bill 2011, *Explanatory Memorandum*, pp 36-37.

Mechanism (CDM), and the New Zealand ETS.[4] As will be discussed, there are serious issues with the first two of these 'credible' schemes.

3.5 There are also many questions surrounding the credibility and the stability of the international market for carbon units. The Australian ETS could be significantly undermined by several international forces:

- market instability and immaturity;
- EU ETS dominance;
- structural flaws with the EU ETS;
- uncertainty of ETS establishment in many countries;
- uncertainty over what constitutes a carbon permit; and
- 'carbon criminals'.

3.6 These critical issues are explored below.

Market instability and immaturity

3.7 Several carbon markets have suffered instability, with European and North American experiences offering stark examples. Such instability will impact the Australian ETS as up to 50 per cent of carbon permits will be sourced from foreign ETSs.

3.8 The European experience so far with one particular type of carbon unit, the Certified Emission Reduction credit (CER), is of great concern to the committee. A CER is a specific project-based carbon credit, and is one of several carbon units issued under the CDM.[5] The CDM allows companies to off-set their emissions, by surrendering the CER credit instead of a carbon permit:

> Large emitters in developed countries can finance individual projects to reduce greenhouse gas emissions in developing countries if this is cheaper than reducing their own emissions.[6]

3.9 In 2010, the market size of primary CERs fell by 46 per cent, representing a loss in value of nearly US$1.5 billion. Furthermore, the market has declined persistently: down 59 per cent in 2009 and down 12 per cent in 2008. Today, primary

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4 Mr Blair Comley, Secretary, Department of Climate Change and Energy Efficiency. *Joint Select Committee on Australia's Clean Energy Future Legislation, Committee Hansard*, 21 September 2011, p. 3.

5 United Nations Framework Convention on Climate Change, 2006, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005*, p.7, http://cdm.unfccc.int/Reference/COPMOP/08a01.pdf#page=6, (accessed 20 October 2011).

6 Neuhoff, K. 2011. *Climate Policy after Copenhagen: The Role of Carbon Pricing*. Cambridge University Press, New York, p. 1.

CERs account for less than 1 per cent of the global carbon market. In 2005 primary CERs comprised 23 per cent of the global market; in 2006, 19 per cent.[7] As is discussed later in this chapter, EU ETS permits comprise 84 per cent of current global carbon trading; with the inclusion of CDM units, the proportion of the global carbon market driven by the EU ETS increases to 97 per cent, as the EU ETS is where most CERs are used.[8]

3.10 As noted by the Energy Supply Association of Australia (ESAA), there has already been price instability within carbon trading markets between different types of carbon units.[9] ESAA makes a further point that not only will this price instability continue, but that the number of forces creating instability will increase, as national and multilateral institutions make country-specific decisions which cannot be anticipated.

3.11 The committee is disturbed by how quickly a previously-significant source of carbon units can be devalued, and is further concerned by what the implications are for an Australian ETS where up to 50 per cent of carbon units could be sourced from overseas markets suffering from such instability.

3.12 Opening in October 2003, the North American focussed Chicago Climate Exchange (CCX) traded in carbon units called Carbon Financial Instruments (CFIs), with the CCX's membership comprised of corporations as well as jurisdictions:

> Chicago Climate Exchange (CCX) was established in 2003 as a voluntary greenhouse gas emission reduction program. Market participants included major corporations, utilities and financial institutions with activities in all 50 United States, 8 Canadian provinces and 16 countries. The total program baseline covered 700 million metric tons of carbon dioxide (CO2) - equal to roughly one-third the size of Europe's cap and trade program.[10]

3.13 Soon after opening, the CCX experienced considerable expansion. As discussed in the World Bank's June 2011 report:

> As new regional initiatives began to take shape in the U.S., membership of the CCX grew from 127 members in January 2006 to 237 members by the end of the year while new participants expressed their interest in familiarizing themselves with emissions trading.[11]

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7 World Bank, June 2011, *State and Trends of the Carbon Market*, pp 47-48.

8 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 9.

9 Energy Supply Association of Australia, *Supplementary Submission 60a*, p. 13.

10 Chicago Climate Exchange, 30 June 2011, *Fact Sheet: Operating leading environmental markets globally*, https://www.theice.com/publicdocs/ccx/CCX_Fact_Sheet.pdf, (accessed 18 October 2011).

11 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 74.

3.14 Despite this interest, the CCX's CFI price dropped from a mid-2008 high of US$7.50 to a low of just US$0.05 in November 2010.[12] After trading for seven years, in late 2010 the CCX closed.[13] As discussed later in this chapter, three other ETS schemes in North America look likely to either collapse or be ineffectual.

3.15 The committee believes that ETS participation or intention to participate is, by itself, not sufficient to sustain a market approach to abatement. The committee recognises the aspirations which many countries have stated they wish to make to emissions reduction. In a submission provided to this committee, it was noted that:

> As of mid March 2010, 108 countries, covering 81.6 per cent of world emissions, have pledged or aspired to cuts that will mean emissions will peak before 2020.[14]

3.16 However, a 2011 survey by the World Bank's Carbon Finance Unit found approximately 75 per cent of respondents were pessimistic 'that a binding international agreement could be achieved in the short term' when asked about the likely success of an international agreement when the current commitment period of the Kyoto Protocol expires on 31 December 2012.[15]

3.17 The effects of this uncertainty are serious; persisting doubts over what international agreements will exist after 2012 'have left Europe alone to absorb the supply of project-based CERs in the post-2012 environment'.[16]

3.18 The United Kingdom's House of Commons Environmental Audit Committee has also recently expressed concern about internationally-sourced carbon permits:

> Allowing the use of international offset credits in that second budget period [2013 – 2017] would make achievement of subsequent carbon budgets more difficult because it could reduce pressure to secure domestic action.[17]

3.19 The UK Government's second carbon budget period runs from 2013 to 2017. It is during this period that Australia's ETS would commence (July 2015).

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12 *The New York Times*, 'Chicago Climate Exchange Closes Nation's First Cap-And-Trade System but Keeps Eye to the Future', 3 January 2011, http://www.nytimes.com/cwire/2011/01/03/03climatewire-chicago-climate-exchange-closes-but-keeps-ey-78598.html?pagewanted=all, (accessed 18 October 2011).

13 *The Financial Times*, 'End of US carbon trading looms', 1 November 2010, http://www.ft.com/intl/cms/s/0/3fe91576-e5de-11df-af15-00144feabdc0.html, (accessed 18 October 2011).

14 National Institute of Economic and Industry Research, *Submission 3 (attachment 1)*, p. ii.

15 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 17.

16 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 47.

17 House of Commons Environmental Audit Committee, *Seventh Report on Carbon Budgets*, 11 October 2011, http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1080/108005.htm#a5, (accessed 13 October 2011).

3.20 The UK's Department of Energy and Climate Change (DECC) has noted weaknesses with an ETS:

> ...it is worth noting that ETSs are one policy tool among others, and that in some specific national contexts, they might not be a suitable mitigation policy. Although the UK remains committed to market-based instruments globally as a cost-effective tool that can help increase global ambition, market-based instruments are only a mean to an end. ETSs are not a silver bullet; they will have to be implemented in combination with other policy tools (e.g. policy tools that directly impact behavioural change and promote investments in new low carbon technologies).[18]

3.21 As the DECC states, an ETS is just one element of a greenhouse gas reduction program, and it only works if other elements are also introduced. If further policies to augment their ETSs are not introduced by other countries, the rationale underpinning a global ETS is weakened.

Dominance of the EU ETS

3.22 The current value of EU ETS allowances is estimated at around US$120 billion (currently about €85 billion, or about AU$112 billion).[19] The EU emits between 12 and 14 per cent of global emissions.[20] The EU ETS currently applies to 'about 45 per cent of the energy-related CO2 emissions of the region', only including some sectors of industry.[21] The committee received evidence in this inquiry that an internationally-linked Australian ETS would allow Australian businesses to 'access lowest cost abatement through global carbon markets over the longer-term' from other ETSs, such as the EU ETS.[22]

3.23 The proportional dominance that the EU ETS has in global carbon trading is concerning. Allowances under the EU ETS account for 84 per cent of all carbon trading in the world.[23] When including the CDMs discussed earlier, this EU ETS dominance increases to 97 per cent.[24] With the closure of the Chicago Carbon

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18 UK Parliament's House of Commons Energy and Climate Change Select Committee, written evidence received from the UK Government's Department of Climate Change, document 1, http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenergy/writev/1476/contents.htm, (accessed 28 October 2011).

19 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 9.

20 World Resources Institute, 2011, *Climate Analysis Indicators Tool, Version 8.0*, http://cait.wri.org/cait.php?page=compcoun, (accessed 25 October 2011).

21 International Energy Agency, 2011, *CO2 Emissions from Fuel Combustion, Highlights (2011 Edition)*, p. 12, http://www.iea.org/co2highlights/co2highlights.pdf, (accessed 20 October 2011).

22 The Institute of Chartered Accountants in Australia, *Submission 32*, p. 2.

23 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 9.

24 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 9.

Exchange in 2010, delays in other schemes, and the lack of progress elsewhere, this EU ETS dominance appears entrenched.

3.24 Furthermore, the environmental impact of the EU ETS is potentially very low. An August 2010 report estimated that the EU ETS (operating since 2005) will reduce emissions by 0.3 per cent by 2012, relative to 1990 levels.[25] The World Bank has stated that during 2010 and 2011, the EU ETS 'continued to be plagued by market irregularities' requiring successive regulatory interventions.[26]

Structural flaws with the EU ETS

3.25 Several recent incidents in the EU ETS have concerned this committee.

3.26 In March 2010 it was discovered that Hungary had been re-selling CERs already submitted by companies to meet their emissions targets. The European Commission quickly made regulatory amendments in order to prevent 'CER recycling' from happening again.[27]

3.27 In mid-2010, Bulgaria had its Kyoto Protocol carbon trading rights suspended by the UN Climate Change Secretariat, which administers the Kyoto Protocol.[28] The suspension followed a finding that Bulgaria violated UNFCCC reporting rules regarding its 2009 annual report to the UNFCCC. In an audit, the secretariat found that 'the individual review report contains a question which triggers the compliance mechanism of the Protocol'.[29] This suggests to the committee that the Climate Change Secretariat considered the Bulgarian annual report to be unreliable.

3.28 Incidents such as these in Hungary and Bulgaria could affect an Australian ETS. As noted in 2007 by the UK Parliament's Joint Committee on the Draft Climate Change Bill, the standards of country B's ETS matter if it is linked to country A's ETS:

> Any linking of different schemes needs to be carefully planned and monitored... This is because one of the two main virtues of a trading

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25 Exigency Management, *Submission 37*, p. 1.

26 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 25.

27 European Commission, 18 November 2010, *Communication from the Commission to the European Parliament and the Council: Towards an enhanced market oversight framework for the EU Emissions Trading Scheme*, http://ec.europa.eu/clima/news/docs/communication_en.pdf, (accessed 18 October 2011).

28 *Reuters*, 29 June 2010, 'Bulgaria suspended from U.N. Kyoto carbon trade', http://www.reuters.com/article/2010/06/29/us-bulgaria-co2-suspension-idUSTRE65S3RU20100629, (accessed 26 October 2011).

29 UNFCCC, Compliance Committee of the Kyoto Protocol, 29 June 2010. *Informal information note by the secretariat – The compliance procedure with respect to Bulgaria,* http://unfccc.int/files/kyoto_protocol/compliance/questions_of_implementation/application/pdf/update_to_informal_information_note_bgr_after_final_decision_20100629.pdf, (accessed 26 October 2011).

> scheme – that it provides “certainty about the level of carbon dioxide emissions that will be achieved as the outcome is fixed and mechanisms are in place to avoid the outcome not being achieved” – can become compromised if it accepts credits generated from another scheme which has a more relaxed (or non-existent) cap, or less robust auditing procedures.[30]

3.29 Discussing the EU ETS in 2007, the UK Parliament's Joint Committee on the Draft Climate Change Bill expressed concern that national governments in the EU had over-allocated carbon permits above their national emissions in Phase I of the EU ETS (2005 – 2007). This surplus of permits meant that UK efforts to reduce emissions had been undermined by the structural deficiency of the EU ETS:

> Thus it appears that, rather than funding emissions reductions elsewhere, the UK’s purchase of [EU] ETS credits has merely bought what has been described as “hot air” – a notional saving that does not actually represent any reduction in global emissions.[31]

3.30 The impact of this over-allocation persists today. The over-allocation of permits was discussed in a submission to this inquiry, which stated that 'one report suggest that there is currently a surplus of 1.4 billion permits – or 3 years of supply' in the EU ETS.[32] In another submission to this inquiry, it was noted that over-allocation subverts the international carbon market:

> ...global carbon trading at the international level is vulnerable to ‘hot air’ type situations in which excess permits...can corrupt the entire system.[33]

3.31 In a September 2011 report, the UK Parliament's House of Commons' Environmental Audit Committee noted that over-allocation had allowed companies to accumulate hundreds of millions of permits worth billions of Euros, negating any incentive to reduce their emissions.[34]

3.32 Phase II of the EU ETS (2008 – 2012) also has serious structural deficiencies, albeit of a different nature. This flaw surrounds the use of permits issued under the

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30 UK Parliament, *Report of the Joint Committee on the Draft Climate Change Bill, Volume 1*, 3 August 2007, p. 32, http://www.publications.parliament.uk/pa/jt200607/jtselect/jtclimate/170/170i.pdf, (accessed 14 October 2011).

31 UK Parliament, *Report of the Joint Committee on the Draft Climate Change Bill, Volume 1*, 3 August 2007, p. 32, http://www.publications.parliament.uk/pa/jt200607/jtselect/jtclimate/170/170i.pdf, (accessed 14 October 2011).

32 Exigency Management, *Supplementary Submission 37a*, p.3.

33 Centre for Energy and Environmental Markets, *Submission 27*, p. 6.

34 UK Parliament, House of Commons Environmental Audit Committee, *Seventh Report on Carbon Budgets*, 11 October 2011, http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1080/1080.pdf, (accessed 13 October 2011).

Kyoto Protocol being used in the EU ETS (and indeed, any emissions reduction scheme):

> One issue here is that CDM [Clean Development Mechanism] credits are issued [in Phase II] against emissions saving projects in developing countries which do not themselves have binding emissions caps under Kyoto; thus one cannot be certain as to their overall contribution to reducing global emissions.[35]

3.33 As heard by the UK Parliament's Joint Committee on the Draft Climate Change Bill, these CDM credits are also potentially bogus:

> ...the economic incentives offered by the CDM appear actually to be encouraging the building of refrigerant plants in the developing world, simply in order that the HFC [hydrofluorocarbons] by-products from the plant can be incinerated, and the credits generated from this sold at a large profit.[36]

3.34 Contrasting these details with comments from the secretary to the Department of Climate Change and Energy Efficiency that he envisaged the Australian ETS linking up with the CDM and the EU ETS because they are 'credible' schemes, the committee regards the reliance of the Australian ETS on the CDM and the EU ETS as yet another flaw in the government's policy.

3.35 The committee notes that it is not alone in this view. Both the UK Parliament's Committee on Climate Change, and the House of Commons' Environmental Audit Committee recommended to the UK Government that international permits not be used.[37] Phase III of the EU ETS will give 164 industry sectors up to 100 per cent of their permits for free. This includes more than 80 per cent of companies covered by the EU ETS.

Uncertainty of ETS establishment in many countries

3.36 In May 2011, a Productivity Commission report noted that both Japan and South Korea had delayed implementing previously-announced ETSs.[38]

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35 UK Parliament, *Report of the Joint Committee on the Draft Climate Change Bill, Volume 1*, 3 August 2007, p. 32, http://www.publications.parliament.uk/pa/jt200607/jtselect/jtclimate/170/170i.pdf, (accessed 14 October 2011).

36 UK Parliament, *Report of the Joint Committee on the Draft Climate Change Bill, Volume 1*, 3 August 2007, pp 32–33, http://www.publications.parliament.uk/pa/jt200607/jtselect/jtclimate/170/170i.pdf, (accessed 14 October 2011).

37 UK Parliament, House of Commons Environmental Audit Committee, *Seventh Report on Carbon Budgets*, 11 October 2011, http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1080/1080.pdf , (accessed 13 October 2011).

38 Productivity Commission, *Carbon Emission Policies in Key Economies*, May 2011, p. xvii.

3.37 In a submission from the Minerals Council of Australia, it was noted that in December 2010 the Japanese government had withdrawn the draft national ETS legislation from the parliament, postponing it to at least 2013.[39] The Association of Mining and Exploration Companies also noted Japan has postponed its plans for carbon pricing.[40] Japan is the world's fifth largest emitter of greenhouse gases.[41]

3.38 Similarly, South Korea delayed the introduction of a national ETS. Due to start in 2013, the scheme would have applied to 60 per cent of national emissions.[42] As discussed at a public hearing, despite the South Korean government offering to provide 90 per cent of permits free, South Korean industry rejected this offer and the introduction of the national scheme has been postponed until at least 2015.[43]

3.39 As already discussed in this chapter, the Chicago Climate Exchange closed in late 2010. However, in the North American region, three other emissions trading schemes have recently experienced significant difficulty.

3.40 The Western Climate Initiative (WCI) is comprised of four Canadian provinces (British Columbia, Manitoba, Ontario and Québec), and seven states in the United States of America (Arizona, California, Montana, New Mexico, Oregon, Utah and Washington). As well as these 11 participating jurisdictions, there are sixteen observer jurisdictions in Canada, the USA and Mexico.[44]

3.41 Yet the WCI is unstable. The Productivity Commission notes that the intention of the WCI is to 'reduce emissions to 15 per cent below 2005 levels by 2020'.[45] Despite this intention, the Productivity Commission noted two emerging but significant flaws: firstly, that 'only California is fully committed to implementing an ETS by 2012' and secondly, that there will be no price and abatement improvement in emissions for 2012 due to recommendations made by the WCI itself. Furthermore, four participating jurisdictions have withdrawn or stated their intention to withdraw from the scheme.[46]

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39 The Minerals Council of Australia, *Submission 57*, p. 19.

40 Association of Mining and Exploration Companies, *Supplementary submission 20*, p. 12.

41 Australian Government, 2011, *Department of Climate Change Fact Sheet: Australia: Part of the Climate Problem – Part of the Solution*, p. 1, http://climatechange.gov.au/en/government/international/global-action-facts-and-fiction/australia-problem-solution.aspx, (accessed 26 October 2011).

42 The Minerals Council of Australia, *Submission 57*, p. 19.

43 Senator Mathias Cormann, Chair, Senate Select Committee on New Taxes, *Committee Hansard*, 10 August 2011, p. 43.

44 Western Climate Initiative website, *WCI Partners and Observers*, http://www.westernclimateinitiative.org/wci-partners-and-observers-map, (accessed 25 October 2011).

45 Productivity Commission, *Carbon Emission Policies in Key Economies*, May 2011, p. 20.

46 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 32.

3.42 Similarly, on the other side of the North American continent, the Regional Greenhouse Gas Initiative (RGGI) scheme is unstable. The RGGI is comprised of ten north-eastern states in the United States of America (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont).[47] Pennsylvania has observer status, as do the three Canadian provinces of Québec, New Brunswick, and Ontario.[48]

3.43 Yet once again, and despite all the interest, the market experienced significant difficulties. The RGGI carbon price has bottomed-out at US$1.89, which was the scheme's floor-price.[49] Furthermore, several jurisdictions are either unclear about their commitment or have announced intention to withdraw.[50] In May 2011 the Governor of New Jersey announced the state's plans to withdraw from the RGGI by the end of 2011.[51] New Hampshire also appears likely to withdraw.[52]

3.44 When operational, the Midwestern Greenhouse Gas Reduction Accord (MGGRA) was comprised of six states in the United States of America (Illinois, Iowa, Kansas, Michigan, Minnesota and Wisconsin) and the Canadian province of Manitoba.[53] Three other states in the United States of America and a Canadian province have observer status. In the beginning of 2011, it was reported that the governors of several MGGRA jurisdictions announced they would not pursue the cap-and-trade dimension of the scheme.[54] The MGGRA website was closed in January 2011, and the World Bank notes that 'MGGRA appears no longer functional with cap-and-trade off the agenda'.[55]

3.45 It is clear to the committee from these recent events that the appetite of many jurisdictions for pursuing the ETS platform is diminishing.

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47 Regional Greenhouse Gas Initiative website, *Program Overview*, http://www.rggi.org/design/overview, (accessed 25 October 2011).

48 Regional Greenhouse Gas Initiative website, *Program Contacts by State*, http://www.rggi.org/Program_Contacts_By_State, (accessed 25 October 2011).

49 Point Carbon, 9 September 2011. *RGGI auction clears at $1.89 amid low turnout*, http://www.pointcarbon.com/news/1.1581766, (accessed 25 October 2011).

50 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 33.

51 *The New York Times*, 26 May 2011, 'Christie Pulls New Jersey From 10-State Climate Initiative', http://www.nytimes.com/2011/05/27/nyregion/christie-pulls-nj-from-greenhouse-gas-coalition.html?_r=2&ref=nyregion, (accessed 25 October 2011).

52 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 33.

53 The Pew Centre for Global Climate Change website, *Midwest Greenhouse Gas Reduction Accord*, http://www.pewclimate.org/what_s_being_done/in_the_states/mggra, (accessed 26 October 2011).

54 Point Carbon, 25 February 2011, *Midwest US ditches carbon market, focuses on jobs*, http://www.pointcarbon.com/pages/shop/1.1510367, (accessed 26 October 2011).

55 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 32.

Uncertainty over what constitutes a carbon permit

3.46 The UNFCCC is currently reviewing methodologies for several elements of the CDM.[56] The World Bank has noted the increasing unsuitability of the CDM scheme to lowering global emissions:

> ...the CDM is simply not designed to drive the structural transformation of industry in developing countries that the transition to a low-carbon economy requires. By definition, offset mechanisms such as the CDM cannot reduce global emissions in net terms.[57]

3.47 Under Phase II of the EU ETS (2008 – 2012) EU member states in the EU ETS permitted (on average) 13.8 per cent of emissions permits to come from the CDM.[58] However, the EU ETS will restrict the use of CDM permits under Phase III (2013 – 2020).[59] It is unclear to the committee what proportion of the EU ETS will be filled by the CDM in Phase III.

3.48 The committee has noted the lack of clarity around the international regulatory regime for the CDM from 2013 onwards, after the conclusion on 31 December 2012 of both Phase II of the EU ETS, and the current commitment period of the Kyoto Protocol.[60]

3.49 Given the importance of the CDM to the EU ETS, the outcome of the UNFCCC review process, the transition to Phase III of the EU ETS and the next commitment period of the Kyoto Protocol, these events may significantly impact on the price of EU emissions permits. Tellingly, the World Bank noted forecasts which predict that prices for a particular type of CDM permit (the CER discussed earlier in this chapter) will continue to decline in Phase III.[61]

3.50 As well as the two UK Parliamentary reports discussed earlier, the National Institute of Economic and Industry Research (NIEIR) also noted that CDM permits which are imported into developed countries may well undermine emissions abatement.[62] As well as providing its own macroeconomic arguments against importing carbon permits, NIEIR also referenced the UK Parliament's Committee on Climate Change report from October 2009, which recommended that the UK scheme not allow import permits (such as the CERs in the CDM) because of their potential to

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56 United Nations Framework Convention on Climate Change, 2011, http://cdm.unfccc.int/methodologies/index.html, (accessed 20 October 2011).

57 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 17.

58 Neuhoff, K. 2011. *Climate Policy after Copenhagen: The Role of Carbon Pricing*. Cambridge University Press, New York, p. 64.

59 World Bank, June 2011, *State and Trends of the Carbon Market*, pp 13-14.

60 National Institute of Economic and Industry Research, *Submission 3*, p. 72.

61 World Bank, June 2011, *State and Trends of the Carbon Market*, pp 50-51.

62 National Institute of Economic and Industry Research, *Submission 3*, pp 71-72.

delay domestic emissions reductions because cheap import credits (such as CERs) can be used to maintain the financial viability of high emitters.[63] This would make future emissions targets unrealistic, and make future reductions more expensive.

3.51 This is further exacerbated by the lack of certainty which has plagued the CDM since its inception.[64] The current state of play, as noted by NIEIR, is that the CDM 'was not extended at the Copenhagen conference, and also that it is unlikely to be included in the approved programs of pro-abatement countries'.[65]

3.52 How this will affect the global situation is unclear, which only adds to the uncertainty surrounding the Australian Government's Clean Energy Future scheme.

'Carbon Criminals'

3.53 The EU ETS scheme has suffered repeated cyber-criminal attacks. This vulnerability persists, despite concerted efforts by the European Commission and EU member states.

3.54 In mid-January 2011, it was discovered that €45 million worth (about AU$60 million[66] at the time) of EU Emission Allowance Units (EUA) had been stolen from the national registries of five EU countries. As a result, EU spot trade was suspended.[67]

3.55 In November 2010, cyber-criminals accessed EU ETS registry accounts in Romania, stealing 1.6 million EUAs.[68] These EUAs were worth €15 million, and belonged to a cement maker, Holcim.[69] In May 2011, 72 per cent of the nearly 400,000 suspected EUAs which had been submitted to the EU ETS for 22 emission sites to cover their 2010 emissions were identified as having been stolen from Holcim.[70]

3.56 After being stolen, the Holcim EUAs had been blacklisted. However, this did not stop the cyber-criminals from selling the EUAs; nor did it protect companies from

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63 National Institute of Economic and Industry Research, *Submission 3*, p. 71.

64 Professor Warwick McKibbin, *Supplementary Submission 25a, Attachment 5*, p. 11.

65 National Institute of Economic and Industry Research, *Submission 3*, p. 72.

66 Historical exchange rates have been sourced from the exchange rate data of the Reserve Bank of Australia, available online: http://www.rba.gov.au/statistics/hist-exchange-rates/

67 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 41.

68 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 41.

69 *Bloomberg News*, 2 December 2010, 'EU Carbon Dioxide Emissions Permits Stolen From Romanian Unit of Holcim', http://www.bloomberg.com/news/2010-12-01/romania-s-holcim-says-eu-carbon-permits-stolen-from-its-account.html, (accessed 18 October 2011).

70 Point Carbon, 24 May 2011. *Table: 72 per cent of suspect EUAs surrendered belonged to Holcim*, http://www.pointcarbon.com/news/1.1542379?date=20110524&sdtc=1, (accessed 18 October 2011).

buying these EUAs in good faith. Six utilities and an infrastructure provider fell for this scam, buying the stolen permits and submitting them to the EU ETS.[71]

3.57 Also in November 2010, the German EU ETS registry was closed after being infected with a 'Trojan' computer virus called 'Nimkey'.[72]

3.58 In early 2010, a phishing scam led to several EU ETS registries being temporarily closed after millions of Euros worth of carbon units were stolen.[73] This crime occurred despite the EU revising its internet security guidelines in January 2009 due to widespread phishing attacks on users of EU ETS registries in 2008 and 2009.[74]

3.59 According to the European law enforcement agency, Europol, European taxpayers lost €5 billion (between AU$8 billion and AU$10 billion during that period) to EU ETS "carousel" fraud in just 18 months up to December 2009, out of a total EU ETS worth around €90 billion at the time.[75] Several European countries were targeted, among them the Netherlands, the United Kingdom, France, Denmark and Belgium.

3.60 The carousel scam involves criminals buying carbon units in EU countries without a Value Added Tax (VAT), importing and then selling the units in an EU country with a VAT added to the price of the carbon unit, but then pocketing the VAT instead of paying it to the relevant taxation authority.[76] It is termed a 'carousel' fraud because the commodity goes round and round. Initially, criminals import a carbon unit from a country without a VAT into a country with a VAT. Next, they repeatedly on-sell the unit through a series of conspirator companies. At each sale the price of the carbon unit increases; these increases also increase the absolute value of the VAT. In the final stage, the final company in the chain of the carousal fraud reclaims the final (vastly inflated) VAT amount from the government, and then disappears before the fraud is discovered. The scam occurs rapidly, is difficult to prove, and taxpayers foot the bill, because the VAT reimbursement comes from government coffers.

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71 Point Carbon, 19 May 2011. *Update: More blacklisted EUAs surrendered*, http://www.pointcarbon.com/news/1.1538851?date=20110519&sdtc=1, (accessed 19 October 2011).

72 World Bank, June 2011, *State and Trends of the Carbon Market*, p. 41.

73 BBC News, 3 February 2010. *Phishing attack nets 3 million Euros of carbon permits*, http://news.bbc.co.uk/2/hi/8497129.stm, (accessed 18 October 2011).

74 European Union, 4 February 2010. Press release 'Emissions trading: Commission takes action over cyber attacks on EU ETS account holders', http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/125, (accessed 18 October 2011).

75 *The Guardian Newspaper*, 14 December 2009, 'European taxpayers lose €5bn in carbon trading fraud', http://www.guardian.co.uk/business/2009/dec/14/eu-carbon-trading-fraud, (accessed 18 October 2011).

76 *The Guardian Newspaper*, 3 December 2009, 'Copenhagen summit: Denmark rushes in laws to stop carbon trading scam', http://www.guardian.co.uk/environment/2009/dec/03/copenhagen-summit-carbon-trading-scam, (accessed 18 October 2011).

3.61 In the first half of 2009, French authorities suspected carousel fraud was occurring in the French carbon trading exchange, BlueNext, which experienced a surge in trading of 'average daily volumes of 9.4 million in May, up from less than 7 million in the first four months of the year'.[77] As a consequence, carbon permits were made VAT-exempt in France. The fraud was estimated at more than €150 million (about AU$270 million at the time).[78]

3.62 In September 2009, the European Commission announced an overhaul to its VAT system to counter carousel fraud.[79] Several EU member states subsequently changed their national tax laws in 2009, with carbon trading volumes dropping by up to 90 per cent.[80] Despite Europol's warning and some EU members amending their tax laws, 12 months later, in December 2010, criminals were still using this scam, attempting to net €500 million in Italy alone (about AU$670 million at the time).[81]

3.63 In an Australian context, the complexity of building a capability to monitor criminality and to integrate this capability into an already complex ETS model is fraught, and is an invitation to carbon criminals. It also means that agencies other than the Clean Energy Regulator and the Climate Change Authority, such as the Attorney General's Department, the Australian Crime Commission, Crimtrac, Austrac, the Australian Tax Office, the Australian Federal Police, the Australian Securities and Investments Commission, the Australian Prudential Regulation Authority, and a myriad of other federal and state agencies, will need to be involved in surveillance of the market and pursuing criminals. The committee is concerned that these agencies will not be adequately and practically resourced ahead of the launch of the flawed scheme, despite the Joint Committee's noting the provisions in the bills for

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77 *Reuters*, 8 June 2009, 'France makes CO2 credits VAT-exempt to avoid scam', http://www.reuters.com/article/2009/06/08/us-carbon-bluenext-idUSTRE55726W20090608, (accessed 18 October 2011).

78 *Le Figaro Newspaper*, 11 December 2009, 'Marché de C02: les fraudeurs à la TVA mis en examen', http://recherche.lefigaro.fr/recherche/access/lefigaro_fr.php?archive=BszTm8dCk78atGCYonbyzsFQE4Y6PyMx8DJbgWM7ihowFb2ntzQXTCAYoeV4gUrYu2IGtjAq08M per cent3D, (accessed 19 October 2011).

79 The Guardian Newspaper, 29 September 2011. *Brussels targets carbon trading fraud ahead of Copenhagen summit*. Available online: http://www.guardian.co.uk/business/2009/sep/29/carbon-trading-carousel-fraud-eu, (accessed 18 October 2011).

80 Europol, 28 December 2010, Press release 'Further investigations into VAT fraud linked to the carbon emissions trading system', https://www.europol.europa.eu/content/press/further-investigations-vat-fraud-linked-carbon-emissions-trading-system-641, (accessed 18 October 2011).

81 Europol, 28 December 2010, Press release 'Further investigations into VAT fraud linked to the carbon emissions trading system', https://www.europol.europa.eu/content/press/further-investigations-vat-fraud-linked-carbon-emissions-trading-system-641, (accessed 18 October 2011).

cooperation between the Clean Energy Regulator and some of these agencies mentioned above.[82]

3.64 Furthermore, the committee is concerned by the potential cumulative effects of such fraud, were it to happen here. As discussed earlier, Europol quantified EU ETS carousel frauds as netting criminals €5 billion in only 18 months to December 2009. This is in a scheme which raises approximately €500 million a year in revenue.[83] The Australian Government estimates that Australian carbon permit revenues will be around $9 billion a year in the last year before the ETS (2014 – 2015).[84] When the fixed price period transitions to the flexible price period, the potential windfall for criminals is significant.

3.65 The committee is concerned that such a rushed policy could result in huge losses to the Australian taxpayer in the initial years of the scheme. If losses here are comparable to international experiences, over the first few years of the scheme criminals could net hundreds of millions of dollars from the Australian taxpayer.

3.66 For this reason, the committee is concerned that the government's plans do not involve the sufficient resourcing and training of all the agencies mentioned above to deal with the complex frauds used by carbon criminals. The committee regards these capabilities as likely being required from the very first day of the Australian ETS, so that agencies can successfully anticipate and prevent the Australian taxpayer and Australian businesses from being defrauded.

Committee comment

3.67 As discussed in this chapter, many emissions reduction schemes around the world have stumbled or fallen. This increases the risks to Australia for relying on internationally-sourced permits, given the failings or failures of these schemes.

3.68 An Australian ETS which relies on internationally-sourced carbon permits will be exposed to destabilising forces over which the Australian Government has little, if any, control.

3.69 Carbon permit price instability and plummeting values, questionable conduct by foreign carbon permit registries, deeply-flawed types of carbon credits, global market uncertainty, carbon criminals and regulatory overstretch all threaten Australian businesses. The scale of the Australian ETS means these forces also threaten the financial security of the Australian people.

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82 Joint Select Committee on Australia's Clean Energy Future Legislation, *Advisory Report on the Clean Energy Bills and the Steel Transformation Bill 2011*, October 2011, p. 86.

83 Minerals Council of Australia, *Submission 57,* p. 8 and p. 15; see also Minerals Council of Australia, *Supplementary Submission 57b,* p. 7.

84 Clean Energy Bill 2011, *Explanatory Memorandum*, p. 41.

3.70 Many governments around the world are all too familiar with poorly planned policies and fatally flawed schemes. It is the view of this committee that the Australian Government should not be so bent on joining their ranks.

Recommendation 3

The committee recommends that if the government proceeds with its carbon tax, that the relevant regulator be sufficiently resourced to minimise the risk of fraud or other undesirable activities that might undermine the integrity of the Australian carbon permits

Recommendation 4

The committee recommends that the government carefully consider the risks and benefits from linking to foreign carbon markets and that comprehensive safeguards be put in place to minimise the risk to Australian purchasers of foreign carbon abatement units.