Trade and Foreign Investment Implications of Australia Introducing an ETS

Submission to Senate Economics Committee Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme

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Executive Summary

The Australian government is introducing an emissions trading scheme (ETS) to fulfil its obligations under the Kyoto Protocol; and to strategically position itself in the event that an international ETS is established following the successful negotiation of a post-Kyoto agreement.

The Kyoto Protocol expires in 2012 and is no longer relevant. All eyes are now on the establishment of a post-Kyoto agreement. Establishing a comprehensive international ETS will require its inclusion in a post-Kyoto agreement. But there is little likelihood of a post-Kyoto agreement incorporating major emission cuts being successfully negotiated.

Establishing an international ETS would require a significant harmonisation and integration of regulatory, accounting, monitoring and enforcement regimes of a level that has rarely been tried. The challenge is manifest. There are currently numerous methods of accounting a carbon dioxide footprint. The standards for monitoring are weak and the systems for assessing the footprint of carbon sinks are unreliable. The standards and certainty of current carbon accounting practices remain incomplete.

Meanwhile the countries that need to participate in a comprehensive international ETS do not have the systems operational to effectively participate, and many cannot be relied on to do so with an adequate level of certainty. Even the EU, when its ETS was established, over-allocated free permits to emissions-intensive industries and set a bad precedent for certainty in view of the higher reputation that EU governments enjoy in comparison to developing country governments. Without integration that provides a high degree of certainty, an international ETS will be an empty vessel.

Further, even though current international economic developments have facilitated emission reductions by reducing energy usage, securing a post-Kyoto agreement is difficult to foresee.

The negotiating positions of countries required to participate to secure a post-Kyoto agreement are too far apart. Notably, the United States (US) would find it almost impossible to achieve the level of emissions proposed by the European Union. The principle of common but differentiated responsibilities between developed and developing countries means that developing countries are unlikely to make the emission reduction commitments necessary to satisfy developed countries. And without the significant participation of India and China and other major emerging economies, the US Senate is unlikely to ratify an agreement put to them. Equally, many developing countries will require emission cuts from the developed countries that bring those countries' emission down to developing country levels (about one quarter of Australia's present level) and perhaps less than this if compensation for past emission levels is called for.

The design of the ETS also raises questions of compliance with Australia's international obligations. Under the ETS the government has decided to prohibit the trade-in of Assigned Amount Units (AAUs), the permits attributable to each country's permitted emissions under the Kyoto Protocol, into the Australian ETS until 2013. By limiting the trade-in of foreign AAUs into the Australian ETS the government may have breached its obligations for "national treatment" and "market access" under the World Trade Organisation's (WTO) General Agreement on Trade in Services (GATS) and equivalent obligations under the free trade agreements in force with the US, Thailand, Singapore and New Zealand.

Additionally, by providing significant free permits under the ETS to emissions intensive, trade exposed (EITE) industries the Australian government may have introduced a prohibited subsidy, or

an actionable subsidy, in breach of its obligations under the WTO's Subsidies and Countervailing Measures (SCM) Agreement.

Further, by requiring emissions-intensive industries to buy carbon permits without full compensation, the Australian government may be indirectly expropriating foreign investor's businesses and profits. Excluding the Australia-New Zealand Closer Economic Relations Trade Agreement, Australia's FTAs provide the circumstances where indirect expropriation can occur. Jurisprudence on indirect expropriation under FTA tribunals provides conflicting decisions on the scope of government regulations as a form of indirect expropriation. A claim for indirect expropriation would need to be assessed on a case-by-case basis.

And by pursuing an ETS over a carbon tax, Australia has made it almost impossible to establish an equivalent border measure to reduce any damage to Australian exporters and industries competing against imports; and to limit carbon leakage until a comprehensive international ETS is established.

The Australian ETS has been developed in a piecemeal manner based on a series of assumptions, including the successful establishment of an international ETS. The government has also failed to properly assess the prospects of the economic and trade policy impacts of an ETS. Before commencing the ETS the government should address these important policy areas.

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About the author

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1.0 Abbreviations

AAUs	Assigned amount units
ACFTA	Australia-Chile Free Trade Agreement
AUSFTA	Australia-United States Free Trade Agreement
CDM	Clean development mechanism
ANZCERTA	Australia-New Zealand Closer Economic Relations – Trade Agreement
CERs	Certified emission reductions
CO_2	Carbon dioxide
$CO_{2\text{-}e}$	Carbon dioxide equivalent
EC	European Commission
EITE	Emissions intensive, trade exposed
ERUs	Emission reduction units
ETS	Emissions trading scheme
EU	European Union
EUA	EU Allowances
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
IET	International emission trading
IETA	International emission trading association
JI	Joint implementation
NAFTA	North American Free Trade Agreement
RMU	Removal unit
SAFTA	Singapore-Australia Free Trade Agreement
SME	Small and medium sized enterprises
SO2	Sulphur Dioxide Allowance Trading Program
t	Tonnes
TAFTA	Thailand-Australia Free Trade Agreement
UN	United Nations
UNCTAD	United Nations Committee on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
WCI	Western Carbon Initiative
WTO	World Trade Organisation
$m	Millions of dollars

2.0 Introduction

The first act of the Rudd Government was to ratify the Kyoto Protocol. Since that time the Australian government has been committed to establishing an emissions trading scheme (ETS). The objective of the scheme has been to bring Australia into compliance with its obligations under the Kyoto Protocol to reduce carbon dioxide equivalent ($CO_{2\text{-}e}$) emissions. The government also favours an ETS approach so that it can participate in an international ETS when it becomes available.

This paper will assess, first, the prospect of the establishment of an international ETS considering the current progress of the establishment of ETSs around the world, how they can be linked, the willingness of governments to participate and the certainty necessary for governments and investors to participate.

Secondly, this paper will also assess how the government has established the ETS and whether it complies with Australia's existing international obligations through the World Trade Organisation (WTO) and bilateral free trade agreements (FTAs) currently in force. The paper will also assess the capacity for the implementation of a border measure to assist export industries and industries that compete against imports, and to avoid carbon leakage.

Quick summary | International carbon trading

- Australia's emissions trading scheme (ETS) has been designed on the assumption that an international emissions trading scheme will emerge.
- The cost burden of an ETS to Australia is reduced if carbon permits can be traded internationally.
- It is highly unlikely that a comprehensive international ETS will be developed, let alone negotiated, in the near future.
- Linking domestic ETS into a comprehensive international emissions trading scheme will be one of the most ambitious international regulatory exercises ever proposed.
- Linking domestic schemes into an international scheme requires a level of cooperation, harmonisation and implementation of sophisticated regulation to deliver necessary certainty that simply does not exist.
- Past experiences in developing ETS across borders all point to a low chance of success.
- Developing a comprehensive international ETS requires the successful negotiation of a post-Kyoto agreement.
- Securing agreement for a post-Kyoto agreement bringing in all the necessary key players is low.
- It is highly unlikely that the United States will meet its Kyoto targets, let alone commit to deeper targets in a post-Kyoto agreement.
- It is highly unlikely that the United States will commit to a post-Kyoto agreement without key developing countries committing to emissions reduction comparable to its own modest reduction commitments.
- It is highly unlikely that key developing countries will commit to a post-Kyoto agreement without calculations of emissions on a per capita basis; leading to higher emissions from developing countries than present.

3.0 International Carbon Trading

The Australian Government's White paper to establish an ETS is built on a series of assumptions, notably that an international ETS will be established that Australia's ETS can integrate with. Both the Garnaut Review[1] and the White paper[2] outline that the cost burden of an ETS would be diminished through international linkages. In particular the papers outline that the cost of trading permits through an international ETS will put downward pressure on the price of permits by enabling the purchasers of permits to buy them where they are cheapest.

The Kyoto Protocol already provides options for international carbon trading through its 'flexibility mechanisms' (see Box 1). Under the Protocol each country is supposed to design a cap-and-trade emissions reduction scheme for $CO_{2\text{-}e}$. These flexibility mechanisms are designed to give countries the maximum opportunity to reduce the cost of a cap-and-trade scheme. It does so by either providing countries opportunities to invest in mitigation outside of their territory if it is cheaper to achieve than domestically, and to allow countries to trade permits and thereby theoretically provide financial incentives for countries to reduce their emissions and penalise those that do not.

Box 1 | Tradeable permits

Joint Implementation permits / Emission reduction units
Under Article 6 of the Protocol, joint implementation permits, or emission reduction units, are permits provided to a country that invests in a joint project in another Annex 1[3] country to reduce emissions in that country. The emissions reduction is subsequently recorded against the emissions level of the investor.

Clean development mechanism permits / Certified emissions reductions
Under Article 12 of the Protocol, CDM permits, or CERs, are provided to countries who invest in projects in non-Annex 1 countries to reduce emissions in that developing country. The emissions reduction is subsequently recorded against the emissions level of the investor.

Assigned amount units (AAUs)
Under the Protocol Annex 1 countries are allocated AAUs. AAUs are assigned to the equivalent tonnage of $CO_{2\text{-}e}$ greenhouse gases each country is entitled to emit based on their Kyoto commitments between the 2008-2012 period. Australia has AAUs equivalent to 108 per cent of 1990 level emissions. Under Article 17 of the Protocol countries are permitted to trade these units if they have surplus units to their requirements. An international carbon market will be established through the buying and selling of AAUs. The trading of AAUs provides the foundations for an international ETS.[4]

[1] Chapter 14 of Garnaut, R., 2008, "Garnaut Climate Change Review: Final report", Commonwealth of Australia
[2] Chapter 11 of Department of Climate Change, 15/12/2008, "Carbon pollution reduction scheme: Australia's low pollution future", White Paper, Commonwealth of Australia
[3] Annex 1 countries include Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom and the United States of America.
[4] United Nations Framework Convention on Climate Change, 1998, "Kyoto Protocol to the United Nations Framework Convention on Climate Change" & United Nations Framework Convention on Climate Change, "Emissions trading", at http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php

Box 1 | Tradeable permits (cont.)

Removal units
Under Article 3 of the Protocol Annex 1 countries are entitled to issue permits on the basis of land use and land-use change and forestry activities.[5]

But despite the incentives provided under the Kyoto Protocol and the lead time since its establishment, ratification and enforcement, a comprehensive international ETS remains elusive. Currently JI and CDM projects are being completed and recognition of those permits is being included in the limited ETS operational. But a comprehensive international ETS will not be established until countries begin trading their AAUs.

The only example of an established international ETS that trades AAUs is that operated by the European Union. This has been used as a test case for how an ETS will be established.

3.1 The objectives of linking an Australian ETS

Trading schemes allow those required to buy carbon permits to assess their mitigation options by investing in new technology, changing their inputs, modifying outputs, reducing production, and so on, against the cost of buying a carbon permit. If the cost of mitigation is less profitable than the cost of buying carbon permits a company will choose to buy additional permits to acquit their emission obligations. An international ETS extends the options for buying permits, thereby assisting countries to find the lowest cost method to reduce their $CO_{2\text{-}e}$ emissions.

In light of the government's commitment to reduce the availability of permits, the cost of each permit is likely to progressively increase over time and make mitigation efforts more cost effective.

Because $CO_{2\text{-}e}$ emissions are a global problem it is irrelevant where the emissions occur because the emissions "have the same impact on climate regardless of the location of the source".[6] Under an international ETS each country would have a cap-and-trade ETS made up, primarily of AAUs. AAUs would be tradable on a market and the cost of permits from other markets will ensure that companies can buy permits from markets where they are cheaper. And "in a perfectly competitive market, permits will flow towards their highest valued use. Those that receive lower value from using the permits have an incentive to trade them to someone who would value them more".[7] Over time the price of a permit should reach an equilibrium global price for greenhouse gases that should be cheaper than if carbon trading were simply limited to domestic permits.

3.2 Linking schemes

Linking Australia's ETS could be achieved through either bilateral links, for example the Australian ETS and the proposed New Zealand ETS linking their trading schemes, or through multilateral linkage – establishing international rules for countries to trade permits in and out of national or regional schemes.

[5] Department of Climate Change, 15/12/2008, "Carbon pollution reduction scheme: Australia's low pollution future", White Paper, Commonwealth of Australia, p11-11
[6] Baron, R., 2001, "International Emission Trading: From Concept to Reality", International Energy Agency and Organisation for Economic Co-operation and Development, p27
[7] Tietenberg, T., 2003, "The tradeable-permit approach to protecting the commons: Lessons for climate change", Oxford Review of Economic Policy, v19, n3, p401

The Kyoto Protocol provides for an international ETS through the trade of AAUs. But under Australia's ETS CERs, ERUs and RMUs from outside Australia can be traded into the scheme. AAUs cannot be. The government has decided against the trade-in of AAUs until after 2013 when there should be greater certainty on the prospects of a comprehensive international ETS following international negotiations of a post-Kyoto agreement.[8]

Countries are already focusing on the establishment of a post-Kyoto agreement that provides a long-term framework for reducing emissions and how that would shape an international ETS. Following the Poznan United Nations Framework Convention on Climate Change (UNFCCC) meeting in December 2008 the Ad Hoc Working Group on Long-term Cooperative Action under the Convention completed a report identifying the priorities for a post-Kyoto Protocol. A number of countries, including Australia, advocated for mechanisms to facilitate an international carbon trading scheme in a post-Kyoto agreement.

But despite the ambitions for an international ETS there are a number of linkage problems that need to be addressed. Implementing an international ETS will be one of the largest global efforts of integration and will be an "unprecedented experiment in international co-operation and regulation".[9] A core problem of a comprehensive international ETS is the issue of permit equivalence and providing certainty to the market place.

Carbon markets operate essentially the same as a normal financial market. The value of a financial product is diminished the more are issued, or the credibility of the equity to underwrite the financial product is uncertain. If a carbon permit is traded at a certain price it is essential that "the value of the credit will be maintained".[10] If the government issues too many permits, or cannot substantiate the equivalent carbon emissions for the permit, it loses value. And with the loss of value goes the credibility and certainty provided in the market, the incentive to invest and the credibility for linking markets. Bowen lays out the conditions for, an efficient and effective global emissions trading market as:

- Having efficient rules and administrative arrangements (including monitoring, enforcement and penalties).
- Including all major suppliers of, and demand for, permits.
- Ensuring that supply and demand for permits delivers a price on carbon that is enough to encourage abatement, yet not so high as to dramatically reduce growth.
- Delivering certainty.[11]

Similar conclusions followed from an EU simulated exercise on emissions trading,[12] and the Government's White paper.[13]

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[8] For more detail on the restrictions on each credit type see Chapter 11 of Department of Climate Change, 15/12/2008, "Carbon pollution reduction scheme: Australia's low pollution future", White Paper, Commonwealth of Australia, p12-13

[9] Werksman, J., 1999, "Greenhouse Gas Emissions Trading and the WTO", Review of European Community and International Environmental Law", v8, i3, p251

[10] Oxley, A., 01/2005, "The prospects for global collaboration on climate change (following the tenth meeting to the United Nations Framework Convention on Climate Change), Australian APEC Study Centre, Monash University, p6

[11] Bowen, B., 2008, Prospects for a global carbon emissions trading system", in "Driving growth = APEC's destiny: Priorities and strategies for APEC's future in the 21st century", The Australian APEC Study Centre, p219

[12] Baron, R., 2001, "International Emission Trading: From Concept to Reality", International Energy Agency and Organisation for Economic Co-operation and Development, p27

[13] Department of Climate Change, 15/12/2008, "Carbon pollution reduction scheme: Australia's low pollution future", White Paper, Commonwealth of Australia, p11-37

Yet currently most of the infrastructure necessary to provide certainty doesn't exist in countries, including developed countries. In Australia the Federal Government is still collecting initial data of Australia's emissions from the private sector. And Australia is significantly more advanced than most other countries.

That would mean establishing government infrastructure in all participating countries to be able to monitor, account and enforce their emissions; and have credible permits equivalent to their emissions sufficient that investors want to buy those permits. As Peterson argues "permit trading can only be an efficient instrument if emission and permit trade are monitored and accounted appropriately and if compliance is enforced".[14]

But without such regimes the certainty of each country's emissions are questionable. The Kyoto Protocol requires Annex 1 countries to have a "national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases".[15] Considering the serious economic transactions taken on the basis of national reporting of their emissions and the subsequent volume and value of permits, estimations provide limited certainty to investors.

And even where regimes exist they pose problems of integration. There are currently "at least 10 to 15 different governmental, international and voluntary initiatives that develop standardised system ... at the moment, a single international standard can not be expected to be forthcoming".[16] Moreover, some sources of greenhouse gases are inherently difficult to monitor.[17]

Additionally, statistical methodologies for calculating emissions from the energy sector vary from country-to-country. The UNFCCC currently provides two different methodologies to compile these statistics.[18] But each methodology delivers different results. Depending on the approach used, past calculations on the increase in France's energy $CO_{2\text{-}e}$ emissions delivered results varying by up to four hundred per cent.[19]

But the problems are not just limited to emissions. There is currently uncertainty in calculating the storage capacity of different carbon sinks used to offset emissions.[20] For example, calculating the storage capacity of forests remains unresolved. And considering recognition of carbon sinks will be central to agreement in negotiating a post-Kyoto agreement, certainty needs to be provided for countries to ensure they are meeting their targets.

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[14] Peterson, S., 17-18/03/2003, "Monitoring, accounting and enforcement in emissions trading schemes", Paper presented at the OCED Global forum on sustainable development: Emissions trading on Concerted action on trade emissions permits country forum, Organisation for Economic Co-operation and Development, p4

[15] United Nations Framework Convention on Climate Change, "Kyoto Protocol to the United Nations Framework Convention on Climate Change", 1998, p6

[16] Peterson, S., 17-18/03/2003, "Monitoring, accounting and enforcement in emissions trading schemes", Paper presented at the OCED Global forum on sustainable development: Emissions trading on Concerted action on trade emissions permits country forum, Organisation for Economic Co-operation and Development, p13

[17] Tietenberg, T., 2003, "The tradeable-permit approach to protecting the commons: Lessons for climate change", Oxford Review of Economic Policy, v19, n3

[18] The approaches are called the Reference and Sectoral approach. Information is available from the United Nations Framework Convention on Climate Change at http://www.unfccc.int

[19] Baron, R., 2001, "International Emission Trading: From Concept to Reality", International Energy Agency and Organisation for Economic Co-operation and Development, p71

[20] Tietenberg, T., 2003, "The tradeable-permit approach to protecting the commons: Lessons for climate change", Oxford Review of Economic Policy, v19, n3, p414

Providing certainty also requires non-compliance penalties. A failure to enforce compliance will result in emitters obfuscating responsibility and, in the process, undermining the credibility of the scheme. If the cost of penalties for non-compliance is too low it will impact on the value of permits. And in an international trading environment, weak penalty regimes in one country may redirect the location of commercial activities where emissions occur[21], including in the territory where weak enforcement exists. [22]

And there are a number of other unresolved issues, including harmonising CDM permits, and the capacity to bank permits.[23]

3.3 Past experiences

A key requirement of establishing an international ETS is linking domestic ETS' to trade carbon permits. To date, almost every ETS has been established within an individual country where the rules are established locally and limited conflicts arise.

Advocates argue that the United States (US)' Sulphur Dioxide Allowance Trading Program (SO_2)[24] provides a good template for an international ETS. The US' SO_2 is a trading scheme designed to reduce sulphur dioxide emissions from electricity utilities. But the SO_2 program was designed, implemented and enforced within a national regulatory framework of States that could reasonably be expected to monitor and enforce emissions standards. The linkage problems were comparatively minimal to those outlined in Section 3.2. And the US government was also not afraid to use a giant stick to ensure enforcement by applying a USD$2,000 per tonne penalty to excess emissions. This is approximately ten fold the highest permit price and provides a real incentive to comply. [25]

A nominal international carbon ETS already exists through the European ETS. But the European ETS is in a unique position to operate across borders because of the pre-existence of the European Commission (EC). But despite the infrastructure already in place, the EU ETS brought out many of the problems that would dog the establishment of a comprehensive international ETS.

Like the US Government did in establishing the SO_2 program, the EC set standards regionally amongst countries for a regional carbon trading cap-and-trade ETS. But some EC countries over-allocated carbon permits to energy producers to minimise the economic pain on their economies. As a result the price of permits collapsed.[26]

Even within a region where countries could reasonably be expected to deliver certainty, the impact of public policy and the whims of governments harmed the scheme. If developed countries cannot

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[21] Baron, R. & Bygrave, S., 2002, "Towards international emissions trading: design implications for linkages", Organisation for Economic Co-operation and Development and International Energy Agency, p33

[22] Tietenberg, T., 2003, "The tradeable-permit approach to protecting the commons: Lessons for climate change", Oxford Review of Economic Policy, v19, n3

[23] Baron, R. & Bygrave, S., 2002, "Towards international emissions trading: design implications for linkages", Organisation for Economic Co-operation and Development and International Energy Agency, p6

[24] Philibert, C. & Reinaud, J., 2004, "Emissions trading: taking stock and looking forward", Organisation for Economic Co-operation and Development and International Energy Agency, p11

[25] Peterson, S., 17-18/03/2003, "Monitoring, accounting and enforcement in emissions trading schemes", Paper presented at the OCED Global forum on sustainable development: Emissions trading on Concerted action on trade emissions permits country forum, Organisation for Economic Co-operation and Development, pp6-7

[26] ___., 2007, "Emission trading suffers as carbon prices plummet", NowPublic, at http://www.nowpublic.com/emission_trading_suffers_as _carbon_prices_plummet

be trusted to get allocations right against their obligations there seems little prospect that developing economies will either.

And the impact of an unpredictable and unstable market will be borne by the unwillingness of businesses to participate. It is a fair assumption that businesses don't want to take risks outside of their core business, which is precisely what risk stemming from emissions trading would do.[27]

3.4 A comprehensive scheme

The most important requirement of a comprehensive international ETS is the participation of all major existing and emerging economies of the world, through the establishment of their own cap-and-trade systems and their preparedness for linkage. Currently that appears unlikely in the near-future.

As outlined earlier, the Kyoto Protocol provided mechanisms for emissions trading. But the Kyoto Protocol is proceeding towards its use-by-date. In 2012 it expires and the current UNFCCC meetings are being conducted to negotiate its successor. Understandably the focus for a comprehensive international ETS is now focused on the outcomes of a post-Kyoto agreement.

Australian columnists, opinion leaders and environmentalists speculate that a post-Kyoto agreement will be successfully negotiated in 2009 and be ready for commencement in 2012. The reality could be quite different.

Under the UNFCCC there is an obligation for common, but differentiated responsibilities between developing and developed countries. The principle of common but differentiated responsibilities requires developed countries to shoulder a larger share of the burden of emissions reduction than developing countries.

The negotiating positions of parties to a post-Kyoto agreement are significant. And despite the postulating of the European Union, its hardline agenda to reduce emissions by 30 per cent of 1990 levels by 2020 is not widely shared.[28]

At UNFCCC meetings there has been strong opposition to the EU's position to extend and deepen mitigation commitments in a post-Kyoto agreement, including at the Bali and Poznan meetings. And opposition has not just been from the US. Developing countries are aware that deep emissions cuts will also require reciprocal deep emissions cuts.[29]

A meaningful post-Kyoto agreement is impossible without commitments by developed and developing countries for deep cuts in emissions.

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[27] Grubb, M. & Neuhoff, K., 2006, "Allocation and competitiveness in the EU emissions trading scheme: policy overview", p14, at www.climatepolicy.com

[28] European Commission, 28/11/2008, "Climate change: Poznań conference must shift negotiations on a new global climate deal into higher gear ", Press Release, at http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1830&format=HTML&aged=0&language=EN&guiLanguage=en and Oxley, A., 09/2007, "Building a pro-development global strategy on climate change", World Growth, p8

[29] Oxley, A., 01/2005, "The prospects for global collaboration on climate change (following the tenth meeting to the United Nations Framework Convention on Climate Change), Australian APEC Study Centre, Monash University, p2

Table 1 | Kyoto commitments and achievements over 1990 baselines

Country	2008-2012 target	2005 actual	
		Including clearing	Excluding clearing
Australia	8%	4.5%	25.6%
Canada	-6%	54.2%	25.3%
EU	-8%	-4.0%	-1.5%
Japan	-6%	7.1%	6.9%
NZ	0%	22.7%	24.7%
Norway	1%	-23.1%	8.8%
US	-7%	16.3%	16.3%

Source: Adapted from United Nations Framework Convention on Climate Change, 2007, "National greenhouse gas inventory data for the period 1990-2005" at http://unfccc.int/resource/docs/2007/sbi/eng/30.pdf

Yet the current reporting data to the UNFCCC (Table 1) shows that no country has unambiguously met its Kyoto targets and, based on their current performance, the prospect of these countries making deeper commitments in a post-Kyoto agreement against their current commitments seems unlikely.

Successfully negotiating a post-Kyoto agreement requires the participation of the developed world, including the US, and most of the developing world, notably India and China. Yet their enthusiasm for participation in a post-Kyoto agreement is limited.

At the 2008 G-8 meeting in Japan Chinese President Hu Jintao reiterated what has long been the mantra of the Chinese Government: "China's central task now is to develop the economy and make life better for the people". The attitude of the Chinese Government is that "developed countries should make explicit commitments to continue to take the lead in emissions reduction".[30]

Meanwhile Indian Prime Minister Manmohan Singh said to the 63rd session of the UN General Assembly: "The outcome must be fair and equitable ... we are committed to our per-capita emissions of greenhouse gases not exceeding those of the developed countries".[31] This implies an eight fold increase in emissions before any action would be necessary as illustrated in Table 2. For China, despite having nearly doubled between 1990 and 2004, per capita emissions remain a fifth of those of the United States' and a quarter of Australia's.

[30] Associated Press., 09/07/2008, "Developing nations reject G-8 climate plan", USA Today, at http://www.usatoday.com/news/world/2008-07-09-Developing-Nations_N.htm

[31] Singh, M., 27/09/2008, "Statement by the Prime Minister of India at the General Debate of the 63rd UN General Assembly", Government of India, at http://pmindia.gov.in/visits/content.asp?id=208

Table 2 | Tonnes of carbon dioxide emissions per capita, 1990 – 2004

Country	1990	2004
US	19.3	20.6
Australia	16.3	16.2
Canada	15.0	20.0
Germany	12.3	9.8
United Kingdom	10.0	9.8
Ireland	8.8	10.5
Japan	8.7	9.9
Norway	7.8	19.1
Italy	6.9	7.8
NZ	6.7	7.7
France	6.4	6.0
Sweden	5.8	5.9
China	2.1	3.8
Thailand	1.7	4.2
India	0.8	1.2
Viet Nam	0.3	1.2

Source: Adapted from United Nations Development Program, 2007, "Human Development Report 2007/2008 – Fighting climate change: Human solidarity in a divided world", United Nations, New York, pp310-313

Without China and India any agreement will be worthless. Meanwhile the US has made it clear that it will not participate in a post-Kyoto agreement without the involvement of developing countries. And despite postulations by President Obama, the US will not be in a position to make significant cuts to its emissions. Obama's recently appointed Special Envoy on Climate Change, Todd Stern, said that the 25 to 40 per cent emissions reductions committed to in the Bali Road Map were "not possible" for the United States.[32] And his comments have been echoed by the head of the Intergovernmental Panel on Climate Change, Rajendra Pachauri, who said recently that President Obama would face a "revolution" if he committed to deep cuts in emissions.[33]

Additionally, the US faces enormous problems in actually agreeing to any commitments at the Copenhagen meeting, despite recent requests by President Obama to establish a domestic ETS.[34] While the EU wants reductions beyond Kyoto obligations, the US has not even met its existing assigned Kyoto targets. Under Kyoto it has the most onerous Kyoto Protocol target of all developed countries. Meeting a post-Kyoto reduction of 1990 levels appears almost impossible when "under a business-as-usual scenario (the US) will be at least 30 per cent higher in 2008-12, than in 1990".[35]

[32] Power, S., 03/03/2008, US Climate official urges Congress to curb greenhouse-gas emissions", Wall Street Journal, New York, at http://online.wsj.com/article/SB123611493656622581.html

[33] Alleyne, R., 11/12/2008, "Barack Obama faces 'revolution' if he imposes tough carbon targets, warns IPCC", The Telegraph, United Kingdom, at http://www.telegraph.co.uk/earth/earthnews/4972025/Barack-Obama-faces-revolution-if-he-imposes-tough-carbon-targets-warns-IPCC.html

[34] Hedegaard, C., 01/10/2008, "Negotiating a new international response to climate change: the prospects for COP-15 in Copenhagen 2009", Speech to the London School of Economics

[35] Bowen, B., 2008, Prospects for a global carbon emissions trading system", in "Driving growth = APEC's destiny: Priorities and strategies for APEC's future in the 21st century", The Australian APEC Study Centre, p221

And despite calls by President Obama in his first State of the Union address for a cap-and-trade scheme to pass the Congress[36] establishing one remains remote. The International Emissions Trading Association identified that the chances of a US cap-and-trade scheme being passed by the US Congress before the Copenhagen meeting are "virtually nil".[37] The IETA optimistically assesses there may be a scheme passed in the next four years.

In the 110th Congress, eight cap-and-trade bills were considered. None passed. The closest any Bill came to passage was the Lieberman-Warner Climate Security Act. The Bill passed committee stages but failed on the Senate floor because of opposition from Republican Senators and Democrat Senators from industrial States. A core concern of Senators from both sides was the impact on energy prices and the broader economy. If a cap-and-trade scheme cannot pass the Senate it is unlikely that it will pass in the House of Representatives. House members are much more sensitive to immediate political considerations, including the impact of regulation on energy prices.

The Kyoto Protocol was never sent to the US Senate for ratification by then President, Bill Clinton, because he knew it would fail. Notwithstanding Presidential commitment and a Democrat controlled legislature there remain powerful, perhaps overwhelming reasons why a treaty involving deep emission cuts could not be ratified by the US.

And a demonstration of the difficulty of reducing US emissions can be illustrated from where efforts have been taken. For example California "which has been at the leading edge of state-level climate efforts, has set a mandatory goal for reducing emissions to 1990 levels by 2020".[38] To facilitate this objective California is a member of the Western Climate Initiative (WCI). The WCI includes seven US States and four Canadian provinces collaborating to "identify, evaluate, and implement collective and cooperative ways to reduce greenhouse gases in the region, focusing on a market-based cap-and-trade system".[39] The WCI has a cap-and-trade scheme across these States and Provinces designed to reduce emissions to California's target. Yet California's target is far behind the United States' Kyoto target to reduce emissions by seven per cent by 2012.[40]

3.5 Conclusions

For an international ETS to be established a large number of policy challenges need to be resolved to provide certainty for countries and investors. The current evidence suggests certainty will not be forthcoming.

Further, any international ETS requires the successful negotiation of a post-Kyoto agreement. But the impact of the global financial crisis, disparate inter and intra negotiating positions of developed and developing countries and long-standing opposition in the US means an agreement is unlikely.

[36] Obama, B., 24/02/2008, "State of the Union", Speech to a joint sitting of both Houses of the United States Congress at http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress/

[37] Carnahan, K. (Ed), 2008, "Greenhouse gas market report 2008: Piecing together a comprehensive international agreement for a truly global carbon market", International Emissions Trading Association, p29

[38] Diringer, E., 22/10/2008, "The US election and prospects for a new climate agreement", Transatlantic Climate Policy Group, Pew Center on Global Climate Change

[39] Western Climate Initiative, 2009, "Western Climate Initiative", at http://www.westernclimateinitiative.org/

[40] United Nations Framework Convention on Climate Change, "Kyoto Protocol to the United Nations Framework Convention on Climate Change", 1998

Quick summary | Australia's trade obligations

- An emissions trading scheme (ETS) poses a number of challenges to Australia's international trade obligations.
- The Australian ETS prohibits the trade-in of assigned amount units (AAUs).
- AAUs are permits equivalent to the tonnage of CO2-e greenhouse gases countries are allowed to emit under the Kyoto Protocol.
- Limiting the trade-in of AAUs may breach Australia's "national treatment" (Article 17(1)) and "market access" (Article 16 (2) (b) & (f)) obligations under the World Trade Organisation's (WTO) General Agreement on Trade in Services (GATS).
- Environmental exceptions in the GATS may not absolve Australia of these breaches.
- Australia has five free trade agreements (FTAs) in force.
- Limiting the trade-in of AAUs may also breach relevant sections of four (United States, Singapore, Thailand and New Zealand) of the five FTAs Australia has in force.
- The allocation of free permits to emissions intensive, trade exposed industries may breach Australia's obligations not to provide a prohibited subsidy under Article III (a) of the WTO's Agreement on Subsidies and Countervailing Measures (SCM).
- By requiring emissions-intensive industries to buy carbon permits equivalent to cover nearly the entire operations of their business activity under an ETS the Australian government may be indirectly expropriating investor's businesses and profits.
- Indirectly expropriating businesses and profits may breach four (United States, Singapore, Thailand and Chile) of the five FTAs Australia has in force.
- The design of the ETS makes the application of a border measure, notably a carbon tariff, impossible to impose; as a result Australian products will be less competitive n the Australian and export markets against those of countries that do not price carbon.

4.0 Australia's Trade Obligations

The establishment of Australia's ETS poses a number of challenges to Australia's international obligations. As former Chairman of the General Agreement on Tariffs and Trade (GATT) (predecessor to the WTO), Alan Oxley, surmised, "there are very significant problems trying to fit an (ETS) into a multilateral trading framework''.[41]

And the Government is acutely aware of the dangerous ground it is treading on. Its White paper stated that, regarding some aspects of the ETS design, the government to monitor consistency with its "obligations under the World Trade Organisation, in particular the Agreement on Subsidies and Countervailing Measures".[42]

Yet analysis demonstrates that the design of the ETS may well breach at least two WTO agreements and a number of Australia's bilateral FTA obligations. This chapter will provide a summary overview of the potential breaches of Australia's international trade obligations identified under the White paper.

4.1 Trading Assigned Amount Units

A component of the ETS design is the international linkage provisions and tradability of emissions permits. The White paper outlines four permit types that will exist in the Australian ETS – CERs, ERUs, RMUs and AAUs.[43] Chapter 11 of the White paper outlines that CERS, ERUs and RMUs can be traded into the Australian ETS. However, AAUs from other Annex 1 countries cannot be traded into the Australian ETS, at least, until the successful negotiation of a post-Kyoto agreement. Doing so may breach Australia's international trade obligations under both bilateral treaties and our WTO commitments.

There has not been a formal dispute tribunal[44] and subsequent jurisprudence related to the classification of the trading of $CO_{2\text{-}e}$ permits. Hence it is unclear whether barriers on trading of AAUs would be considered under "goods" or "services" chapters of trade agreements.
The literature tends to support that it is more likely to be a service, than a product. The literature also supports that carbon permits would classify as a financial service. [45]

But, even after considering whether a carbon permit falls within the scope of a financial service, it remains in doubt whether the service is the financial product itself, or the trading-in of the financial product. Because of the lack of jurisprudence on carbon permits it remains unclear.

Regardless, there is a good basis to argue that limitations on of the trading-in of the financial service, or limitations of the act of trading-in of a financial service could breach market access obligations under bilateral and multilateral agreements.[46]

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[41] Sutherland, T., 15/09/2008, "WTO may challenge free permits", Australian Financial Review, p9
[42] Department of Climate Change, 15/12/2008, "Carbon pollution reduction scheme: Australia's low pollution future", White Paper, Commonwealth of Australia, p12-13
[43] For an overview see Section 3.0 of this paper.
[44] Voigt, C., 2008, "WTO law and international emissions Trading: Is there potential for conflict?", Carbon and Climate Law Review, i1, pp53-54
[45] Jinnah, S., 2003, "Emissions trading under the Kyoto Protocol: NAFTA and WTO concerns", Georgetown International Environmental Law Review & Martin, M., 2007, "Trade law implications of restricting participation in the European Union Emissions Trading Scheme", Georgetown International Environmental Law Review

4.1.1 Breaching GATS

GATS governs liberalisation of services under the WTO. Carbon permits or permits are not listed as a potential financial service under GATS because GATS essentially predates the UNFCCC and the Kyoto Protocol, but there is a strong argument that it would be classified as a financial service.[47] Core principles of GATS includes the obligations for "national treatment" under Article 17 and "market access" under Article 16. National treatment obligations require foreign service suppliers[48] to receive equivalent treatment to domestic service suppliers. Market access obligations require countries to give access to their market for foreign service providers; and disallows countries imposing quantative restrictions on foreign service provision, unless outlined in the individual country's schedule. Under GATS each country is required to provide a schedule of the limitations provided on services within their territory. Under Australia's schedule related to financial services there appears to be no limitation on financial services relevant to the acceptance of AAUs in the ETS.

Under the basic provisions of "national treatment" and "market access" it is likely that the restrictions of trading in foreign AAU permits into Australia's ETS will breach our GATS obligations. Disallowing the trading of AAUs into the Australian ETS may breach either Article 17 (1) that requires WTO members to "accord to services and service suppliers of any other Member, in respect of all measures affecting the supply of services, treatment no less favourable than it accords to its own like services and service suppliers". And it may also breach our market access commitments covered under Article 16 (2) (b) requiring members not to "maintain or adopt ... limitations on the total value of service transactions or assets in the form of numerical quotas"; and Article 16 (2) (f) requiring members not to "maintain or adopt ... limitations on the participation of foreign capital in terms of ... foreign shareholding or the total value of individual or aggregate foreign investment".

Under GATS there is provision for general exceptions, governed under Article 14 and Annexes that cover sector specific exceptions. Of relevance to limiting the trade-in of AAUs under GATS is Article 14 (b) that states measures are acceptable "necessary to protect human, animal or plant life or health". On a superficial level it would appear that this exception could absolve the Australian government from any breaches of its GATS obligations on the basis that anthropogenic climate change may harm "human, animal or plant life or health".

But the history of dispute settlement in the WTO has tended to interpret environmental exceptions quite narrowly. To argue this exception the Australian government would need to be able to argue that limiting the trade-in of AAUs into the ETS would be necessary to "protect human, animal plant life or health". But considering Australia emits less than 2 per cent of global $CO_{2\text{-}e}$ emissions, and in the absence of an international ETS to reduce emissions, it is difficult to argue that Australia's ETS would do much to "protect human, animal plant life or health", nor that the trade-in of AAUs may undermine the scheme.

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[46] Jinnah, S., 2003, "Emissions trading under the Kyoto Protocol: NAFTA and WTO concerns", Georgetown International Environmental Law Review & Martin, M., 2007, "Trade law implications of restricting participation in the European Union Emissions Trading Scheme", Georgetown International Environmental Law Review

[47] Martin, M., 2007, "Trade law implications of restricting participation in the European Union Emissions Trading Scheme", Georgetown International Environmental Law Review & Jinnah, S., 2003, "Emissions trading under the Kyoto Protocol: NAFTA and WTO concerns", Georgetown International Environmental Law Review

[48] Under GATS service provision is based on four different 'modes' outlined under Article 1 of the Agreement

In addition to the general exceptions of Article 14, there are general exceptions outlined under the Annex on Financial Services. The Annex does provide some comfort for the government in terms of its failure to adhere to its market access and national treatment obligations. Section 2 (a) of the Annex provides for "a member not be prevented from taking measures ... to ensure the integrity and stability of the financial system".

Based on the requirements of the restrictions for trading-in of AAUs the government may have breached its GATS commitments. The challenge the government faces is establishing its unilateral restriction on all foreign AAUs would compromise the "integrity and stability of the financial system".

4.1.2 Breaching FTAs

Australia currently has five bilateral trade agreements in force, including:

- the Australia-United States Free Trade Agreement (AUSFTA).
- the Singapore-Australia Free Trade Agreement (SAFTA).
- the Thailand-Australia Free Trade Agreement (TAFTA).
- the Australia New Zealand Closer Economic Relations – Trade Agreement (CER).
- the Australia-Chile Free Trade Agreement (ACFTA)[49].

Each Agreement deals with the area of financial services. For example, Article 2 of Chapter 9 of SAFTA deals with Financial Services and states that "each party shall permit a financial service supplier of the other Party established in its territory to supply any new financial service of a type similar to those services that a Party would permit its own financial service suppliers, in like circumstances, to supply under its domestic law". Similarly, Chapter 13 of the AUSFTA deals specifically with Financial Services. Articles 13.2 and Article 13.4 provide equivalent national treatment and market access commitments as required under the GATS. More importantly, under Article 13.6 addressing new financial services, the AUSFTA requires the Australian Government to permit the "supply (of) any new financial service that the Party would permit its own financial institutions, in like circumstances, to supply without additional legislative action by the first Party". Limiting the trade-in of AAUs is a likely breach of these Articles.

Neither the CER nor TAFTA have a specific Chapter dealing with financial services. The CER covers financial services under its Chapter addressing trade in services, and Articles 4 and 5 deal with market access and national treatment respectively. Both sections have equivalent wordings to Australia's GATS obligations, without identifiable exceptions to these commitments by limiting the trade-in of New Zealand AAUs into the Australian ETS. TAFTA provides equivalent standards, with direct reference to GATS.

ACFTA is the only FTA that provides clear justification to limit the trade-in of AAUs.[50] Chapter 12 of ACFTA provides for trade in financial services between the two countries. Article 12.7 of the FTA includes reference to a "New financial service" and provides for no limitations on trade, "provided that the introduction of the financial service does not require the Party to adopt a new law or modify an existing law".[51] While it is possible for carbon permits to be classified as an existing financial service, it is likely that the exception provided under this Article through the legislative requirements

[49] The Australia-Chile Free Trade Agreement will come into force on the 6th of March 2009
[50] ACFTA enters into force on the 6th of March 2009
[51] Department of Foreign Affairs and Trade, 2008, "Australia-Chile Free Trade Agreement", Commonwealth of Australia

to establish tradable carbon permits would remove any breach of the FTA by limiting the trade of AAUs.

Essentially the limitation to trade-in AAUs from New Zealand, Thailand, Singapore or the US is a likely beach of our FTAs. But as none of these countries currently have operational Federal trading schemes, it would be impossible to demonstrate appropriate damage to each country and for the present moment the breaches will remain benign. Only ACFTA provides policy flexibility to limit the trade-in of AAUs. However amendments to each FTA could be made to provide certainty and address compliance with trading permits and trade obligations.

4.2 Free 'subsidy' permits

The Australian ETS is designed based on accounting for the production of $CO_{2\text{-}e}$ greenhouse gases. Not their consumption. As a result the government has provided for the allocation of free carbon permits to EITE industries to offset the costs incurred from the ETS.

The allocations of free permits are being provided on the basis that the additional cost of the ETS will harm exporting industries and industries that compete with imports that don't price the cost of carbon. Further, if economic harm is done to industries it may promote the off shoring of emissions and cause carbon leakage. The provision of free permits to EITE industries is also provided to avoid the need to apply a border measure, such as a carbon tariff. But under a production-model for pricing $CO_{2\text{-}e}$ greenhouse gases with the allocation of free permits, these gases are affectively not priced, or accounted, for. [52]

The allocation of free permits under the Australian ETS is not innovative. For example, in the European ETS countries were required to allocate free permits under their National Allocation Plans.[53] Currently there has been no dispute in the WTO or through bilateral agreements to classify whether the allocation of free permits is a subsidy. But that does not mean that they are allowable. How free permits are allocated makes a significant difference in whether they are both classified as, or act as, a subsidy under a country's bilateral or multilateral agreements. Under the design of the Australian ETS the free allocation of permits is provided to businesses on the basis of their international trade-share, as well as their exposure to emissions-intensity.

Chapter 12 of the White paper outlines the justifications for the provision of free permits to EITE industries and their allocation. In summary, EITE industries will be provided with permits of between 60 to 90[54] per cent of their emissions if their trade share is 10 per cent or more of their annual production assessed against a series of base years; or, if it can be demonstrated that the cost of the carbon price cannot be passed onto the consumer.[55]

The provision of free permits poses a number of problems for Australia's international trade obligations, notably its obligations to limit subsidies under the WTO's Agreement on Subsidies and Countervailing Measures (SCM). As Werksman argues the way in which carbon permits to emit

[52] Carmody, G., 29/08/2008. "User pays key to climate", The Australian

[53] European Commission, 25/10/2003, "Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (Text with EEA relevance)", Official Journal L 275 , p 0032-0046, at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0087:EN:HTML

[54] 60 per cent for activities with emissions intensity between 1000t CO2-e/$m and 1999t CO2-3/$m revenue or between 3000t and 5999t CO2-e/$m value-added and 90 per cent for activities with emission intensity of at least 200t CO2-e/$m revenue or 6000t CO2-e/$m value added

[55] Department of Climate Change, 2008, "Carbon Pollution Reduction Scheme: Green paper", Commonwealth of Australia, p12-31

greenhouse gases "are allocated and are used to restrict emission-related economic activity will … have an impact on the trade in products and services covered by the WTO".[56]

Article 1 of the SCM Agreement defines subsidies. Of note, it is likely that the allocation of free emissions permits would be considered a subsidy under Article 1 (a) (1) (ii) that defines a subsidy as "government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits)". Breach of Article 1 (a) (1) (ii) is likely as the provision of free permits amounts to the Federal government forgoing revenue that it would otherwise collect, and a strongly arguable subsidy under the SCM Agreement.

In addressing subsidies, the SCM Agreement breaks subsidies into two categories – prohibited and actionable subsidies. For a country claiming a breach of the SCM Agreement it will always argue, where possible, that a breach of the SCM agreement includes a prohibited subsidy, because a prohibited subsidy does not require proof of harm to industries. Whereas, to justify a countervailing measure in response to an actionable subsidy a country must provide proof of harm.

4.2.1 Prohibited subsidies

Prohibited subsidies are outlined under Article III, including notably section (a) that a prohibited subsidy includes a subsidy "in law or in fact, whether solely or as one of several other conditions, upon export performance, including those illustrated in Annex 1". Under this section "in law or fact" is a standard that is achieved "when the facts demonstrate that the granting of a subsidy, without having been made legally contingent upon export performance, is in fact tied to actual or anticipated exportation or export earnings".

Annex 1 provides a list of potential examples of subsidies that are considered prohibited. It includes Annex 1 (e) that states a subsidy includes "the full or partial exemption remission, or deferral specifically related to exports, of direct taxes or social welfare charges paid or payable by industry or commercial enterprises".

By allocating free permits based on a company's trade-share it is possible that the Australian government created a subsidy "contingent, in law or in fact, whether solely or as one of several other conditions, upon export performance". It is arguable that the allocation of free emissions permits based on a company's trade share breaches Australia's SCM obligations and acts as a prohibited subsidy.

4.2.2 Actionable subsidies

Actionable subsidies are outlined under Article 5 of the SCM Agreement and are those that adversely affect a WTO member, including:

(a) injury to the domestic industry of another member;
(b) nullification or impairment of benefits accruing directly or indirectly to other Members under GATT 1994 in particular the benefits of concessions bound under Article II of GATT 1994;
(c) serious prejudice to the interests of another Member.

Should the industry of another country be able to substantiate that "injury" under (a) or serious prejudice against another country's interest under (c) be substantiated, it is likely that the free

[56] Werksman, J., 1999, "Greenhouse Gas Emissions Trading and the WTO", Review of European Community and International Environmental Law", v8, i3, p262

allocation of permits could fall within the grounds of an actionable subsidy. If it fell within the realms of an actionable subsidy countries would then be able to take countervailing measures to respond and Australian exports would be hit with a duty in export markets.

4.3 Expropriation of an investment

Under the ETS the federal government has added a significant additional cost to emissions-intensive industries, such as coal fire powered electricity generators. The cost is imposed through the necessity to buy carbon permits equivalent to their emissions. And because emissions are a direct by-product of their primary business activity, the volume and coverage of business activity required to be covered by the purchase of carbon permits is nearly total.

By requiring these businesses to buy permits equivalent their business activity, at significant cost, it is arguable that their business and business profits are being indirectly expropriated by the government of Australia. And if it can be substantiated that Australia is indirectly expropriating their business and business profits, Australia may face compensation claims from investors with investments in emissions-intensive industries through our obligations under FTAs.

Direct expropriation occurs when governments directly legislate or regulate to take businesses or profits of a business. But indirect expropriation also occurs as an effect of legislation or regulation. The requirement to purchase a carbon permit by emissions-intensive industries is not direct expropriation, but may be indirect expropriation.

4.3.1 Australia's FTAs and indirect expropriation

Indirect expropriation has no standard definition, but does have precedent in international law.[57] But Australia's FTAs do provide some guidance.

No FTA is the same. But there is similar language covering the grounds and terms in which expropriation can occur in all of Australia's FTAs, except with New Zealand.

Article 11.7 of the AUSFTA deals with the issue of expropriation and compensation. Section 1 states that expropriation can only occur "for a public purpose", "in a non-discriminatory manner", "on payment of prompt, adequate, and effective compensation", and "in accordance with due process of law". Annex 11-B of the AUSFTA also indicates that the provisions of Article 11.7 should be read in the context of "customary international law", and particularly Section 4 of the Annex indicates that "an action or series of actions" constitutes "indirect expropriation" and should be assessed on a "case-by-case, fact-based inquiry".

Similar provisions also apply in TAFTA (Article 912), ACFTA (Article 10.11) and SAFTA (Article 9). In each case the recurring themes are "for a public purpose", "in a non-discriminatory manner", "in accordance with due process of law" and "on payment of compensation". ACFTA also includes provisions equivalent to those in AUSFTA clarifying that expropriation includes "indirect expropriation".

The test for any claim for indirect expropriation is provided by the FTAs. The most likely case that a claim could be made against the criteria outlined by the FTAs is that emissions-intensive industries

[57] Yannaca-Small, C., 2004, ""Indirect expropriation" and the "right to regulate" in international investment law", Organisation for Economic Co-operation and Development, Working paper on international investment, n4, p9

are being discriminatorily targeted because of the nature of their business activity, and that full compensation is not being provided through the partial allocation of free permits.

4.3.2 Jurisprudence and indirect expropriation

Assessing whether Australia is indirectly expropriating businesses or its profits by requiring emissions-intensive industries to buy carbon permits is unclear. Unlike the allocation of free permits as subsidies, and the trading-in of AAUs into the ETS, there is jurisprudence on what constitutes indirect expropriation and under what circumstances it is acceptable from NAFTA tribunal disputes and decisions from the European Convention for the Protection of Human Rights.[58]

Jurisprudence has identified broad criteria assessing indirect expropriation, including "the degree of interference with the property right", "the character of government measures" and "the interference of the measure with reasonable and investment-backed expectations". But the capacity to define a case for indirect expropriation remains ambiguous because any claim for indirect expropriation can only be assessed on a "case-by-case" basis.[59]

Yannaca-Small[60] provides a discussion of relevant international tribunal cases assessing the issue of government regulation and expropriation. For example, under NAFTA a US company *S.D. Myers Inc* challenged the Canadian government's ban to export a substance into the United States. The ban was not imposed at the time they established factories in Canada and claimed that by doing so, the Canadian government expropriated their property by removing their capacity to close factories in the US. The decision of the Tribunal was extensive, but significantly it resolved that "the general body of precedent usually does not treat regulatory action as amounting to expropriation", and that "expropriations tend to involve the deprivation of ownership rights; regulations are a lesser interference".[61] The decision of the Tribunal appears to interpret government regulation as a form of expropriation quite narrowly.

Yet a dispute by *Metalclad Corp* against the government of Mexico under the dispute mechanisms of NAFTA provided much broader interpretations. The Tribunal noted "expropriation under NAFTA includes not only open, deliberate and acknowledged takings of property ... but also covert and incidental interference with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property even if not necessarily to the obvious benefit of the host State".[62] It should be noted that the language in NAFTA and Australia's FTAs are very similar in words and intent. The breadth of the interpretation of expropriation in the Metalclad case contrasts significantly in comparison to the narrowness of the S.D. Myers Inc dispute tribunal.

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[58] Yannaca-Small, C., 2004, ""Indirect expropriation" and the "right to regulate" in international investment law", Organisation for Economic Co-operation and Development, Working paper on international investment, n4, p10

[59] Yannaca-Small, C., 2004, ""Indirect expropriation" and the "right to regulate" in international investment law", Organisation for Economic Co-operation and Development, Working paper on international investment & Paulsson, J., 12/12/2005, "Indirect expropriation: is the right to regulate at risk?", Paper presented to the Making the most of international investment agreements: A common agenda symposium organised by the International Centre for Settlement of Investment Disputes, the Organisation for Economic Co-operation and Development and United Nations Conference on Trade and Development

[60] Yannaca-Small, C., 2004, ""Indirect expropriation" and the "right to regulate" in international investment law", Organisation for Economic Co-operation and Development, Working paper on international investment

[61] Dolzer, R., 12/18/2002, "Indirect expropriations: New developments?", New York University Environmental Law Journal, p86

[62] Dolzer, R., 12/18/2002, "Indirect expropriations: New developments?", New York University Environmental Law Journal, p88

And the European Court of Human Rights decided in a claim by *Sporrong and Lönnroth* against the government of Sweden related to land regulations that "although the right [of peaceful enjoyment of possessions] lost some of its substance, it did not disappear ... (because) the [claimants] could continue to utilise their possessions and that, although it became more difficult to sell properties, the possibility of selling subsisted".[63]

And in a NAFTA dispute between *Menthanex Corporation* and the US government the tribunal resolved that "it is now established in international law that States are not liable to pay compensation to a foreign investor when, in the normal exercise of their regulatory powers, they adopt in a non-discriminatory manner *bona fide* regulations that are aimed at the general welfare".[64]

Whether Australia has indirectly expropriated businesses or their profits through the ETS is debatable. And despite the indications from the cases above, there is a breadth of jurisprudence of diverse decisions by tribunals. These cases only demonstrate the level of ambiguity surrounding defining when a government has indirectly expropriated.

4.3.3 Investment exceptions

Should a tribunal be able to substantiate that indirect expropriation occurred, the breadth of exceptions under Australia's FTAs may provide the policy flexibility for the government to indirectly expropriate regardless.

Article 11.11 in AUSFTA deals with "Investment and Environment ", and states that a country may introduce measures "in a manner sensitive to environmental concerns". Similarly, the AUSFTA provides general exceptions for "non-discriminatory regulatory actions (to protect) ... the environment" under Article 11.11(4)(b). Similar general exceptions are also provided in Annex 10-B(b) of ACFTA. Article 1601 (3) of TAFTA adopts the relevant general exceptions under GATS which includes measures "necessary to protect human, animal or plant life or health". And SAFTA adopts the same language of TAFTA under Article 19 (b).

While environmental exceptions in international trade law tend to be read narrowly, the Investment and Environment provisions of the AUSFTA are broad. In addition to the general exceptions, having an exception of an "environmental concern" would suggest a broad interpretation of the evidence required to substantiate the justification of expropriation.

The general exceptions to protect "the environment" and "necessary to protect human, animal or plant life of health" under the AUSFTA, ACFTA, SAFTA and TAFTA are more likely to be interpreted narrowly consistent with jurisprudence in international trade law and as discussed in Section 4.11 of this paper.

A claim for indirect expropriation for an emissions-intensive industry under one of Australia's FTAs is unclear. The text of FTAs and customary international law does provide the basis for arguing that

[63] Yannaca-Small, C., 2004, ""Indirect expropriation" and the "right to regulate" in international investment law", Organisation for Economic Co-operation and Development, Working paper on international investment, n4, p13

[64] Reinisch, A., 2007, "New developments in indirect expropriation", presentation to Australian National University Symposium, at http://law.anu.edu.au/cipl/Lectures&Seminars/2007/New%20Developments%20in%20Indirect%20Expropriation%20ANU.pdf

indirect expropriation can occur as a result of regulatory action. But the jurisprudence in the area only provides one certainty – any assessment should be completed on a case-by-case basis.

4.4 Responding with a border measure

The Government's ETS Green paper flagged the potential for "border adjustments" to assist Australian businesses against competitor exports and imports that do not have a carbon price.[65] Border measures may also be necessary to avoid carbon leakage. Border adjustments can take many forms, but the most commonly recognised is a tariff. In the case of the ETS an appropriate border measure would be a carbon tariff that factors in the price equivalent for the carbon dioxide emissions of the good or service equivalent to it being produced in Australia.

In the Green paper the government flagged its intention to avoid border adjustments and confirmed this commitment in its White paper. Instead the government has chosen to allocate free carbon permits to EITE industries.

But whether free permits will be sufficient for these industries and the offer of free permits will be provided over a long enough timeframe until an international ETS is operating remains in doubt. With no set date for a comprehensive international ETS the allocation of these free permits are not guaranteed. And the government's White paper makes it clear that the allocation of free permits will be reduced over time.

Despite the government's preferences the prospect of a border measure such as a carbon tariff cannot be taken off the table. The EU has included border measures in its proposal for a post-2012 EU ETS and Bills put before the US Congress also include the prospect of a carbon tariff in response to the application of an ETS. As Garnaut identifies "the pressure, and indeed the case, for border measures will grow" [66] in the absence of an international scheme.

But concurrently the design of the ETS also makes it impossible to apply appropriate border measures to reflect the additional cost burden on Australian businesses.

As the Green paper identified the capacity for an application of a border adjustment is difficult because it would "require the accurate tracking of all inputs used in the production of a 'landed' good to determine both the amount of embedded emissions in that good and the effective carbon prices that has been applied to the inputs".[67] The problems associated with tracking, rules of origin and the rate of application of a border adjustment is exceedingly onerous.

The government has correctly identified the complexity of the problem it would face in applying a border measure. But what it has not identified is that the design of the ETS would also make it difficult to do so while adhering to Australia's commitments under the WTO.

Additionally, the problems associated with the application of a border adjustment is made significantly more difficult as a result of the government choosing a trading scheme over a tax. Under the General Agreement on Tariffs and Trade Australia can require goods imported into Australia to pay the equivalent of domestic taxes, including as a border measure. But under Article X these must be advertised and affectively stable so as to provide certainty for business.

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[65] Department of Climate Change, 2008, "Carbon Pollution Reduction Scheme: Green paper", Commonwealth of Australia, Chapter 9

[66] Garnaut, R., 2008, "Garnaut Climate Change Review: Final report", Commonwealth of Australia, p233

[67] Department of Climate Change, 2008, "Carbon Pollution Reduction Scheme: Green paper", Commonwealth of Australia, Chapter 9

Such rules are inconsistent with a border measure that reflects Australia's proposed carbon price signal. Because the price of carbon will be embodied in a floating carbon permit the price will change regularly and would need to be reflected in any border measure. Doing so would make the application of a border measure inconsistent with Australia's WTO obligations.[68]

4.5 General discussion

Despite the possibilities outlined above, any breach of bilateral or WTO obligations are speculative. There have currently been no examples of disputes under bilateral or WTO agreements related to AAUs, carbon permits as subsidies or border measures. As a result there is no jurisprudence to classify whether a carbon permit, or its trading, is a good or a service; or whether the allocation of carbon permits is a subsidy. There is jurisprudence on what classifies as indirect expropriation. But the jurisprudence clearly suggests that indirect expropriation would need to be assessed on a case-by-case basis.

It is unclear when there will be clarity provided. Disputes under the WTO and Australia's bilateral agreements must be prompted by one party challenging the actions of another party. In the case of the free allocation of carbon permits as a subsidy, that would require one country to challenge the EU's ETS arrangements through a WTO dispute settlement panel.

Regardless, these disputes are unlikely to occur in the near future. While countries like the US do not have an operating ETS it appears unlikely they will challenge the allocation of permits or tradable AAUs until they, at least, have their regimes established. And because the 'subsidies' allocated through free permits is in response to an additional tax on domestic industry, the impacts on another country that does not factor the price of carbon on exports is low. The only scenario where impact may occur is when a government removes other domestic taxes to impose the cost of an ETS.

The biggest potential looming threat comes from the application of border measures to respond to a lack by countries having a carbon price through a carbon tax or ETS. There has been some sabre rattling for border measures by the EU and provisions for a carbon tariff in Bills considered by the US Congress. Until negotiations for a post-Kyoto agreement have succeeded or failed it remains unlikely a border measure will be applied by any country.

Ultimately, until the allocation of permits, the tradability of permits and the application of border measures are introduced and brought into dispute they can continue operating. But that does not make them consistent with our WTO and FTA obligations. And for the same reason, despite operating for a number of years without being challenged, neither are EU ETS arrangements consistent with WTO and FTA obligations.

Currently the conflicts between country's environmental goals and trade obligations are the elephant in the room. Eventually they will have to be dealt with because the potential for conflict between environmental and trade aspirations is too high. What is likely to occur is the negotiation of an agreement to address these conflicts to provide countries with flexibility mechanisms and certainty.

[68] Sutherland, T., 27/09/2008, "Protecting industry in carbon plan may be illegal", Australian Financial Review, p12

4.6 Conclusions

By establishing an ETS before there is a comprehensive international ETS and appropriate adjustments to WTO or bilateral agreements, Australia has entered into a legal and policy minefield.

It is likely Australia is in breach of its GATS obligations under the WTO and also many of its bilateral agreements by limiting the trade-in of AAUs into an Australia ETS. Further, by allocating free permits to EITE industries it is likely that Australia is also in breach of its SCM obligations under the WTO, by establishing a prohibited subsidy.

Further, by requiring emissions intensive industries to buy carbon permits without full compensation, the government may be indirectly expropriating businesses and their profits under Australia's FTA obligations.

And, the very design of an ETS limits the capacity of Australia to establish a border measure to respond to the additional costs that will be borne by Australian export industries and industries that compete with imports, and also to directly avoid the possibility of carbon leakage.

But the absence of a dispute in the WTO or between countries with an FTA ensures that these disputes remain academic.

6.0 Final conclusions

The design and establishment of an ETS in Australia is one of the biggest public policy challenges ever faced by Australia. And the speed of its design and establishment has exposed a number of critical problems that could beleaguer the scheme into the future.

The ETS is being developed on the expectation that an international ETS will be forthcoming. Currently an international ETS is an ambition, not a reality. Establishing an international ETS would require a significant harmonisation and integration of regulatory, accounting, monitoring and enforcement regimes of a level that has rarely been tried. Additionally, the political and economic uncertainties of the development of an international ETS appear burdensome. It is unlikely that an international ETS will be developed in the short-to-medium term.

The design of the Australian ETS may result in breaches of Australia's obligations through FTAs and the WTO. Limiting the trade-in of foreign AAUs into the scheme is likely to beach Australia's GATS and FTA obligations, without cover from environmental exceptions in these agreements. The allocation of free permits is also likely to breach Australia's SCM obligation. In both cases the government is exposing Australian interests to retaliatory measures that could hamper our export interests.

Further, it is possible that by requiring emissions-intensive industries to buy carbon permits without full compensation, the Australian government may be indirectly expropriating businesses and their profits inconsistent with Australia's FTA and WTO obligations. But any claim could only be assessed on a case-by-case basis as the jurisprudence on indirect expropriation provides limited clarity.

And the very nature of a floating carbon price undermines the capacity for Australia to impose a border measure, particularly a carbon tariff.

Before establishing the ETS the government should be mindful of addressing these policy conflicts. Individually these problems pose policy challenges for the Australian government. But compounded, they significantly undermine the ETS' credibility and its capacity to operate.

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