



Response to Garnaut Climate Change Review

Issues Paper 2:

**Financial Services for Managing Risk: Climate
Change and Carbon Trading**

February 2008

1. Introduction

The Australian Financial Markets Association (AFMA) is pleased to make this submission to the Garnaut Climate Change Review Issues Paper 2, which considers climate change and carbon trading issues as they relate to financial services and markets in Australia.

Key aspects of our work include:

- Engagement with government policy departments and regulators on matters of law and regulation that cover financial markets;
- Management of the conventions, documentation and data services that ensure the efficient operation of Australia's \$81 trillion non-exchange over-the-counter (OTC) markets and consistency with global standards;
- Supporting high professional standards through training and officially recognised accreditation for individuals engaged in the financial markets.

A core objective of AFMA is to promote the development of efficient and competitive financial markets in Australia. In the context of environmental products, AFMA has played a leading role in the development of spot and forward trading in Renewable Energy Certificates, NSW Greenhouse Abatement Certificates and other environmental product markets in Australia since 2001. We are currently working with our members to secure the conditions and mechanisms necessary to support an efficient market for carbon trading.

AFMA's focus in this submission is on:

- Building effective carbon trading markets; and
- Positioning Australia as a regional hub in the Asia-Pacific carbon markets.

The key issue for financial markets are those that will facilitate a deep and liquid carbon trading market – specifically; clarity over scheme design specifications and supporting infrastructure and certainty in emission caps, coverage and thresholds. This will require clearly established medium and long-term targets to provide certainty for business and financial markets.

As the federal Minister for Climate Change and Water recently observed, the design of an effective carbon market under the Emissions Trading Scheme (ETS) is vital, as the price it sets will determine the "the cost of carbon", which will change the way that decisions are made throughout the economy.

It is also vital to obtain reliable information on the extent and time profile of the carbon constraint on the economy and the likely design of the carbon market as soon as possible; uncertainty is currently inhibiting investment planning and decision making.

2. Building Effective Carbon Trading Markets

Q. Are there any institutional inhibitors to the emergence of an Australian ETS?

While elements of the infrastructure required for an effective ETS need to be put in place, there are no institutional inhibitors to the emergence of an Australian ETS that cannot be overcome.

Australia's financial system has a strong capacity to support the development of an efficient emissions trading market. This capability exists at all levels in the emissions transaction chain including price discovery, trade execution, clearing, settlement, permit registration and data services. Both OTC and exchange market venues for trading are well developed. It is also reflected in the availability of high-quality support services like research, market analysis, risk management, product development and investment advice.

This is the outcome of a range of factors including: the relative sophistication of Australia's financial markets in regional and global terms, deregulated financial markets, an open economy and a strong commodity base; all of which support innovation in the provision and use of risk management products and other financial services. Another factor is the effectiveness of our regulatory system, which is held in high regard internationally, and supports the high standard of market integrity from which we benefit.

This also reflects the valuable experience that market participants and government bodies have acquired through the operation of the existing range of energy and enviro-markets, including GGAC in NSW and the MRET scheme nationally. Through these markets and schemes, many of the key non-financial companies that would wish to trade carbon permits already have in place trading experience, administration systems and risk management controls that can be enhanced to help them participate in the market in an assured manner. However, some participants in the new market will be less experienced and they (indeed, probably all) participants would benefit from an education program in the lead-up to the scheme.

Hence, while much remains to be done to put in place the complete infrastructure and conditions for a successful ETS, we believe Australia is well placed to achieve this outcome within the timeframe envisaged.

Important components of the institutional framework that have yet to be developed are as follows:

- Market administrator and regulator - A government authority to regulate and administer the ETS, including activities such as maintaining a permits registry, monitoring compliance and auditing of liable persons. A relevant authority (either the scheme administrator or another body) should also have a responsibility to monitor the overall performance and quality of the ETS against the stated policy intent, and be charged with maintaining its functionality in delivering reliable price signals against that policy intent.¹ This is required since, as a regulatory market, the ETS must maintain public and participant confidence that the purposes of the scheme are genuinely being

¹ This does not mean it should intervene to influence prices, which it should not do.

achieved. Loss of confidence in the scheme would ultimately result in significant regulatory changes to the scheme and it is sought to avoid such changes once implemented. This authority would need appropriate independence built into its charter to allow it to remain focussed on ETS objectives and act primarily in the best interests of the market—and not potentially fall victim to the short-term demands of the political cycle.

- Government management processes - Appropriate delineation of responsibilities within Government agencies, having regard to Government's multiple roles as scheme rules-maker, scheme administrator, unit issuer and, potentially now since Kyoto Protocol ratification, buyer of units for sovereign compliance.
- Market consultation process - As has been seen in MRET and GGAS, by its nature as a market that exists because of regulation, the ETS is highly sensitive to changes in the administration and technical settings of the market. Therefore, part of the ETS infrastructure should be a defined process to enable an effective ongoing dialogue between government, the regulator and market participants on the effectiveness of the market and related administration issues.
- Market integrity regulation - ASIC must have the regulatory resources and expertise to conduct effective market oversight of the ETS derivatives markets.
- OTC market trading infrastructure - The existing infrastructure needs to be expanded to facilitate the efficient trading of carbon permits; including trading conventions and standards, documentation and benchmark price data (all of which AFMA will provide) that assists market self-regulation.
- Exchange trading infrastructure - The Australian Securities Exchange and other market operators have trading platforms, monitoring systems, etc. that can be adapted to facilitate on-exchange trading of carbon based instruments, once contract specification are settled.
- Post-trade mechanisms for permit transfers - These need to be efficient for both on-exchange and OTC transactions; ideally through a government built and run registry, with Austraclear or other acceptable clearing and settlement providers as a sub-registry to enable delivery versus payment settlement and ensuring international linkages (for example, CER transfers).

The public release of reliable information on market conditions in a timely manner is the lifeblood of efficient financial markets. This promotes effective price discovery, which is critical to achieving the underlying policy objective of containing carbon emissions in the way that is least costly in economic terms. To facilitate this, AFMA believes it is necessary to have reporting mechanisms, with a responsible authority empowered to ensure a flow of timely and accurate emissions information to the market.

Against this backdrop, we welcome the creation of the National Greenhouse and Energy Reporting System (NGERS) and the establishment of the Greenhouse and Energy Data Officer, which are important components of the financial market infrastructure.

NGERS contains significant compliance assurance mechanisms to ensure the quality and integrity of the data reported to the market. These include

compliance and enforcement procedures, including investigations, external audits, infringement notices and audits, amongst other things. We think it is right to place a significant emphasis on the generation of high-quality data to inform the market of the demand and supply factors that might affect market prices. AFMA agrees with this approach and also with the Government's aim to streamline reporting procedures and reduce the regulatory burden on reporting companies.

However, it is unclear how the financial year cycle of NGERS will reconcile with what is increasingly a global standard of calendar year reporting and compliance for emissions obligations. Semi-annual reporting will meet the dual requirements of government agencies that require financial year reporting and those that require calendar year reporting. AFMA supports the more frequent than annual release of emissions data to maintain an informed market.

AFMA believes the information collected through NGERS should be made available to the public at no charge, in keeping with the principle that applies to the release of Australian Bureau of Statistics (ABS) data.²

Q. Is permit price realisation and discovery best facilitated through the use of auctioning under an ETS?

AFMA supports an auction process for the release of permits to the market.

The auction process will assist price discovery by providing an insight into the evolving demand and supply balance in the market, whereas an allocation process would offer no new information in this regard. This will be particularly relevant in the early stages of the market's development.

However, permit auctioning is not the only available mechanism for permit price discovery. There are international examples where price discovery has been achieved in markets with low levels of initial auctioning. By way of example, average weekly market turnover in the EU ETS for the 13 weeks ending 15 February 2008 was 30.1 million units, which extrapolates to 1,565 million units per annum. With 2008 unit issuance of 2,089 million units the liquidity ratio (turnover/stock) is a healthy 75%, despite there having been minimal auctioned volumes of EUAs.

Thus while auctioning is certainly desirable from a market design perspective, it is noted that the absence of auctions does not automatically preclude the development of an efficient market over time.

With regard to management of the tender process, frequent auctions of small parcels (rather than infrequent offerings of large parcels) are best suited to assist price discovery in the market. This also reduces the capital requirements involved from participants.

Turning to the mechanics of the auction itself, a tender process similar to that for Commonwealth Government Securities (CGS), as conducted by the Australian Office of Financial Management (AOFM), is recommended.

² When making all ABS data free of charge from December 2005, the then Treasurer highlighted the importance of business decision-makers having "... readily available statistical information with which to make informed decisions".

This process (see Attachment 1) is instructive for a potential ETS permit auction because:

1. It follows a tried and tested financial market process, which is relevant as an ETS permit could be viewed as a financial instrument in the same way as CGS and traded accordingly;
2. The tender process could be managed by an independent agency similar to the AOFM. This agency would also maintain a registry with settlement via Austraclear or other acceptable clearing and settlement providers to clear existing financial transactions and would be consistent with current financial market settlement protocols;
3. The process is accessible by all interested parties without undue restriction;
4. The process is transparent providing price discovery based on supply and demand, rather than an administratively determined price;
5. The concept of an issuance calendar provides supply/demand timing signals to the market. This may be an important feature at the onset of the scheme where small frequent auctions would limit the potential for 'winners and losers', while establishing necessary price signals.

Recognising that spot markets will be relatively illiquid until sufficient permits enter the system, some interim controls may be required to build market confidence (e.g. preventing one participant from taking out an entire tender). It is beneficial to encourage as wide a range of participants in the permit market as early as possible and it may also be favourable to retain a limit on the percentage of permits that a participant can capture into the future to avoid any one entity exercising excessive market power. Such controls should be removed once the market has deepened and they have served their purpose.

Q. To what extent, and on what basis, might it be desirable that permits are not allocated via an auction system?

AFMA's main concern is that the permit issuance process should not undermine the efficiency of the carbon permits market. We believe that, as a general proposition, efficient markets require that if compensation is to be provided to some sectors of the economy, this should be done by a mechanism that is separate from the operation of the ETS to the greatest extent possible.

In the event that direct allocations that bypass an auction system are made, then the higher are direct allocations to emitters, the lower the initial liquidity in the secondary market is likely to be. Returning to the EU ETS example, the average weekly turnover for the 13 weeks ending 30 December 2005 (the end of the first compliance year) was 6.2 million units—around 20% of current turnover. It can therefore be concluded that a high level of allocation (as has been the case in the EU ETS) is an impediment to the development of secondary market liquidity; liquidity will eventually grow, but almost certainly at a somewhat slower pace than would be the case with higher levels of auctioning.

At a minimum, a mix of free allocation and auctioned permits will need to be appropriately balanced to ensure optimal price discovery and market efficacy in the event that the scheme is designed to allow such a mix.

While it is a now well-known issue, it is worth repeating that over-allocation of permits to affected sectors could potentially lead to many of the same issues experienced in Phase 1 of the EU ETS and undermine the efficiency and credibility of the market, and should thus be avoided.

Q. What features of an ETS might impede the emergence of forward markets?

Forward markets are a vital component of the ETS, and are likely to be considerably larger than the spot market for permits. The price signals they emit and the risk management opportunity they afford are vital to informed investment decision-making. In this context, it is relevant to reflect on the fact that the ETS is not just about altering the use of existing plant and equipment; it is also about driving future investments into low-emission technology. To the extent that the ETS is expected to drive new investment, the Government should ensure that the conditions support forward market efficiency.

Features that could impede the emergence of forward markets include any design or regulatory mechanisms that remain subject to possible change. The rules and regulations should be sufficiently flexible to allow companies to predict and calculate their emissions liabilities without compromising the integrity of the system's purpose. Uncertainty around the rules, caps, etc. in any form reduces this capability, impeding liquidity in the forward markets. Therefore an ETS should be designed to achieve maximum certainty.

Q. Is it possible to have strong and efficient forward markets with restrictions on the use of permits, such as limited banking and borrowing?

Borrowing

The conduct of borrowing, lending and sale/repurchase transactions by market participants with each other is a natural and vibrant part of most financial markets. We expect the ETS market will develop similar private contract facilities to enable the transfer of carbon permits between participants. This activity will redistribute the outstanding stock of permits but will not increase it. It will also act to promote greater market liquidity and a more efficient market, so the design of the ETS market should not inhibit its development.

In contrast, borrowing of permits by liable companies from the government (or market regulator) would result in an increase in the amount of permits in circulation. Consequently, it is a separate and more complex matter to assess and its effect on market development requires careful consideration.

Borrowing in the form of a small shortfall buffer (e.g. 5%) of an individual company's liability, which is carried forward to the following compliance year, would be feasible and should be permitted on economic terms (that is, with an implied interest rate) to facilitate the smoothing of compliance obligations in the early stages of the regime when companies are in the process of adjusting to ETS. This would constitute borrowing from government (the market regulator) and it would help reporting companies to manage

underlying uncertainty with inventories and minimise future costs, whilst still providing certainty within a limited range for compliance.

Permitted borrowing of this type (i.e. from the Government) should be small relative to the spot market as a whole, as it involves moral hazard to the extent that liable companies do not have to meet their immediate obligations. If left unchecked, this could lead to inaction on emissions reduction, and the associated build-up of borrowing could create pressure for change to the policy rules underpinning the market. In other words, significant borrowing would heighten the risk of the market rules being changed over time - and this form of change is the greatest risk to participant confidence and the development of an effective market. This risk would need to be addressed.

In addition, significant borrowing from the government would require practical measures to support an efficient market. For example, allowing borrowing on a significant scale would require data releases on emitters' short positions in order to keep the market informed of changes in the underlying demand/supply balance over time. Measures may also be necessary to ensure that borrowing does not distort the forward market, which should determine prices largely on the cost of carry. Forward prices would reflect any uncertainty about potential large swings in the forward stock of permits.

As noted above, these matters are complex and they may benefit from further analysis when the basic framework of the ETS takes firmer shape.

Banking

The ability to bank carbon permits would not conflict with the policy intent of the ETS or undermine its integrity, as the relevant emissions amount would not have been discharged. However, it would provide reporting companies with the ability to manage their compliance obligations more flexibly, by having regard to their emissions profile over time (e.g. due to variations in production over the cycle).

In addition, the ability to bank carbon permits for use at future dates would avoid a situation where excess supply in the current year would depress the carbon price significantly below its medium term level, which could harm investor confidence and creating unnecessary price volatility from year to year.

3. Positioning Australia as a Regional Hub in the Asia Pacific Carbon Markets

Q. How can governments help facilitate Australia becoming a regional hub in the Asia-Pacific Carbon Markets?

AFMA's many member firms have sought over the years to maximise the proportion of their international business activities conducted in Australia. Our focus here is on the potential for Australia to serve as a regional hub for trading carbon instruments and provide related services. Our members believe that, under the right conditions, there is a real opportunity to capture a significant share of the market for the activities we expect to emerge in the region.

Australia will face competition for this carbon-related business. Singapore and Hong Kong are regional financial centres with a strong tradition as crossroads in international business. Japan is a significant part of the world economy in its own right, with associated large domestic financial markets. Each jurisdiction has specific advantages and disadvantages as a location from which to conduct carbon trading. Singapore has already signalled its intention to become the regional trading hub for carbon markets.

What is a carbon trading hub?

It may be helpful to clarify what we mean by a carbon trading hub. It is a centre:

- with deep, liquid and sophisticated emission-trading markets (both exchange and OTC) with active participation by Australian, international traders and users of carbon-trading instruments, and has a dominant role within the region;
- with skilled traders and management in carbon trading backed by intellectual capital covering interdependent services, such the management of carbon funds to support abatement projects, as well as legal and accounting support for multi-disciplined teams that facilitate large cross-border transactions in an efficient and competitive manner;
- that can add significant value to carbon risk management through a workforce capable of responding in an innovative manner to evolving business conditions;
- that provides all facets of carbon-related services including management, trading, support functions and market services (like data services);
- where international carbon trading is able to be conducted profitably, easily and efficiently;
- with the world's best telecommunications and IT capacity and a plentiful, well-educated, multilingual workforce;
- that complements other global financial centres in the era of 24-hour trading.

Australia's advantages as a carbon trading hub

Australia has many advantages as an international trading centre, many of which reflect our advanced financial development and innovative financial culture:

- The early implementation of a comprehensive domestic ETS should provide a platform of significant scope and size from which to build international trading and attract key regional traders to Australia.
- The most sophisticated domestic financial system in the region to support carbon trading, including leading brokers, an international exchange market, clearing houses and trading and finance houses.
- A strong, stable and transparent legal and regulatory system supported by a strong governance culture and associated arrangements.
- Many potential players in the international market have a business presence in Australia.
- A time zone location that spans New York, London and Tokyo.
- Political and economic stability.
- A multilingual professional financial services workforce that can flexibly respond to changing business conditions and independently add value to services provided through Australia.

- Low cost and efficient communications and information systems.
- Competitive costs, including general living expenses, commercial rents and a high-quality social infrastructure.
- Regional leadership in finance education and training.

Australia's immediate challenge is to maximise the economic benefits that should flow from these by attracting international trading in emissions instruments, including carbon credits.

Actions to enhance our prospects as a regional trading hub

The initiative to develop Australia as a regional trading hub for carbon should be founded on an effective partnership between government (state and federal) and industry.

The Assistant Treasurer and Minister for Competition Policy and Consumer Affairs, Chris Bowen MP, has been given responsibility for the development, implementation and administration of policies in relation to Australia as a financial services hub. This initiative is welcome as it will give authority, priority and direction to the actions required to pursue the policy.

It goes without saying that Australia must have an effective ETS to attract international business. Other matters that should be addressed to promote the development of Australia as a regional hub for carbon trading include the following:

- International integration - There must be clarity about the manner in which the Australian ETS will integrate with the major overseas schemes. Australia should adopt a trading unit and internationally compatible registry for the domestic market that is consistent with that adopted in the major overseas markets (the EU at present).
- A clear strategy to make Australia a carbon hub - The Government should develop a strategy to make Australia a trading hub and keep this up to date. Policy development should build on the objective shared with industry of a successful outcome. The policy should target regional management and market functions, as well as back office and trading activity to ensure critical mass in Australia.
- Keeping Australia competitive - There must be a dynamic interaction between the Government, its agencies and industry through a structured liaison process with industry to respond to practical problems (e.g. regulation) in keeping Australia competitive as a carbon hub.
- Taxation - There is uncertainty about the application of State and Federal taxes to carbon permits and trading in them. The States should clarify that a transaction tax will not apply to the issue or trading of carbon permits; the Federal Government should make carbon trading eligible transactions for offshore banking units and clarify the intended tax rules for permits when the ETS design is sufficiently advanced.
- Information and marketing - Build on information about our existing strengths as an international financial centre and develop other relevant measures to demonstrate our advantages relative to our competitors.

This is not an exhaustive list of potential action items. However, the key message is that government commitment, supported by action, to the policy

objective of making Australia a regional trading hub for carbon is essential to a successful outcome. This will give international traders confidence that any emerging issues in future years will be dealt with quickly and effectively.

4. Concluding Comments

We appreciate the opportunity to make this submission to the Review. We expect that further analysis of some issues raised here will be required, as the form of the recommended ETS takes shape and we look forward to being able to contribute constructively to this process.

We would be happy to discuss any of the issues raised in this submission or to consider any other matters that you may wish to discuss with us. If we can be of further assistance, please contact Allen Young, Senior Policy Executive, on (02) 9776 7941, and he can make the necessary arrangements.

Attachment 1

Auctions may be designed in many formats. The 'cap and trade' approach to an ETS, supported by AFMA, is consistent with current financial market activity and, as such, the Australian Office of Financial Management (AOFM) tender process for the distribution of Commonwealth Government Securities would be an appropriate framework on which to model an ETS permit auction.

This briefing note looks to summarise the AOFM tender process.

Commonwealth Government Securities (CGS) tenders or auctions have been managed by the AOFM as agent for the Reserve Bank of Australia (RBA) since 2006. The AOFM is a specialist Australian Government agency primarily responsible for the management of Australian Government debt. It was established on 1 July 1999 and is a prescribed agency under the *Financial Management and Accountability Act 1997*.

The AOFM aims to manage the net debt portfolio for which it is responsible at least cost over the medium-term. It also contributes to the operation of financial markets by supporting efficient Treasury bond and Treasury bond futures markets.

In May 2006, it was announced that the AOFM would proceed with the introduction of an electronic system for the collection and processing of tender bids for the issue of CGS, and that the Bloomberg Auction System (BAS) had been chosen following an open selection process.

Arrangements for implementation of the new tender system were completed and future tenders for the issue of Treasury notes and Treasury bonds will be conducted using BAS. Bids for stock offered for sale via the new tender system may only be submitted by parties that are registered with the AOFM.

- To register requires entering into a Registered Bidder Agreement with the AOFM, which then binds the Registered Bidder and AOFM to the AOFM Tender System Conditions of Operation.
- The procedure by which bids are submitted using the tender system is outlined in the User Guide for Authorised Dealers. Authorised Dealers are the persons authorised by a Registered Bidder to lodge bids in the tender system for the Registered Bidder.

All tenders will be officially announced on the AOFM website (www.aofm.gov.au) on the day prior to the day of the tender. Tender announcements provide full details of the tender, including details of the stock that is being offered. Notification of tender announcements and results can be obtained by subscribing to the AOFM email service with settlement completed via Austraclear.

Tender announcements and results will also be broadcast via the Bloomberg and Reuters wire services. The relevant pages are as follows:

	Bloomberg	Reuters
Treasury bond tenders	AOFM1	AOFM01
Treasury note tenders	AOFM2	AOFM02

- In conjunction with the new tender arrangements the *Terms and Conditions of Issue* documents for Treasury notes and Treasury bonds have been replaced by new Information Memoranda.
- The tenders are conducted by the AOFM using the AOFM Tender System. The Tender System is accessed via the BLOOMBERG PROFESSIONAL[®] Service. Bids for stock offered for sale via the Tender System may only be submitted by parties that are registered with the AOFM.
- All tenders are officially announced on the day prior to the day of the tender. Tender announcements provide full details of the tender, including details of the stock that is being offered.

The closing time for submitting bids for all tenders is 12.15pm on the day of the tender.

Bids are accepted in ascending order of yield bid; that is, from the lowest yield bid to the highest yield accepted. Allotments are made at the yields bid with tender results announced as soon as possible after the close of bidding.

Expected issuance dates and proposed volumes of Treasury bonds to be offered are outlined in an issuance calendar.