SUBMISSION TO THE

INTERJURISDICTIONAL EMISSIONS TRADING WORKING GROUP

FROM THE

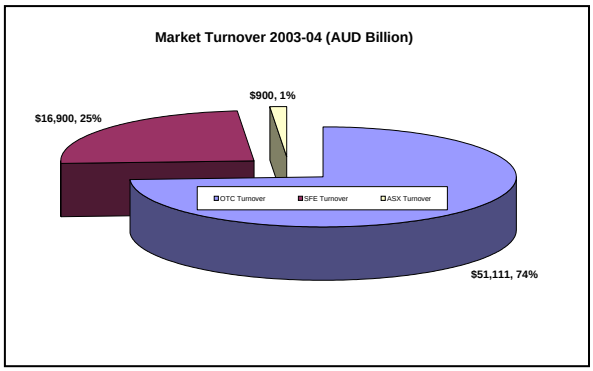
AUSTRALIAN FINANCIAL MARKETS ASSOCIATION

November 2005

Introduction to AFMA

The **Australian Financial Markets Association (AFMA)** was formed in 1986 to streamline market practices and establish trading standards, initially, in OTC markets. It has since become the industry's peak association, representing around 130 organisations participating in Australia's financial markets.

AFMA covers transactions in foreign exchange; interest rate products such bills and bonds; forex and interest rate derivatives such as swaps options and forwards; repurchase agreements; commodities; equity derivatives and electricity derivatives, as well as financial instruments traded on-exchange. As recorded in the 2003-04 AFMA Australian Financial Markets Report (AFMR) total turnover in financial markets was estimated to be almost $A69 trillion, of which approximately 75% was transacted OTC.



AFMA's objectives are to:

- promote and facilitate the development and maintenance of efficient, progressive and constructive markets for financial instruments and other related transactions;
- encourage self-regulation through the establishment of efficient and ethical practices and conventions and preparation and maintenance of standard documentation;
- effectively represent the common interests of its members before legislative and regulatory bodies, institutions and other organisations;
- keep members informed of developments and issues relevant to the markets for financial instruments including legal taxation and accounting matters; and
- collect and disseminate market data.

AFMA and the environmental Markets

Several environmental markets are emerging in Australia, including those related to trading Greenhouse Gas Emissions and the MRET Renewable Energy Certificate market. In most of these markets forward trading is occurring, with varying levels of activity, and the majority of entities involved are AFMA members.

Participants in any commodity market risk price movements that are adverse to their interests. Price volatility in response to changes in supply and demand is inherent in market operation, and this creates to Market Risk. The ability to enter into forward contracts and other financial instruments is a key risk management tool, and fundamental to the long term investment decisions that are made.

AFMA is committed to bringing our experience in the development of the financial markets to assisting the development of the financial instruments related to these emerging environmental markets.

In particular, AFMA established an Environmental Products Working Group in mid-2002 which provides AFMA with guidance as to OTC requirements in these markets. The membership of this group is drawn from major participants in environmental markets.

Examples of AFMA's market development activities since mid-2002 include:

- development of standard documentation for the forward trading of Renewable Energy Certificates, Greenhouse Gas Abatement Certificates and Gas Electricity Certificates. This documentation is used in conjunction with the International Swaps and Derivatives Association (ISDA) Master Agreement, which is the global standard for derivatives market documentation. AFMA has also released "short form" documentation to facilitate small volume "spot" transactions where use of an ISDA Master Agreement is not appropriate. The AFMA documentation is a widely accepted standard for the spot and forward trading of RECs, GACs and GECs.

- Since the 2001/02 AFMR, collecting data on trading volumes for REC derivative contracts.

- Starting in late 2002, publishing a weekly "Environmental Products Market Revaluation" curve, which provides pricing data for a variety of environmental products (including RECs and GACs) across a range of contract periods from Spot to 5 years forward. An example of this data is included as Appendix A.

More information about AFMA and in particular our activities related to environmental markets is available at the AFMA website, www.afma.com.au

Scope and format of this submission

In the context of the stakeholder consultation paper, AFMA's mandate relates to the efficiency of the financial markets surrounding any proposed emissions trading scheme.

AFMA's remit does not include commenting on the appropriate size of any target, or issues of allocation mechanisms, except in so far as such physical market arrangements impact on market efficiency and associated the financial markets.

For clarity and easy of reference our submission is divided into headings that closely follow the layout of the *background paper for stakeholder consultation* released on 12th September 2005.

AFMA General Comments on the Consultation Paper

Having reviewed the consultation paper, AFMA feels that the consultation paper does a very thorough treatment of the issues. However AFMA would express the concern that questions of market regulation and market performance monitoring are not being sufficiently considered. This is a different question to compliance monitoring.

Market monitoring

Environmental markets have generally been implemented by government agencies independent from those traditionally associated with the oversight and management of financial (and other) markets. This has meant that some key lessons from the design and performance of financial and major commodity markets have not been heeded in the design of environmental markets.

In part this is because of the understandable reluctance of government departments with an environmental focus to become involved on an ongoing basis in issues of market regulation, management and performance monitoring.

While understandable, this is **also a dangerous position to take**.

The theoretical benefits of using markets to implement environmental policy rest on the assumption that the market is efficient. At the very least, an efficient market requires:

- good design (market institution);
- good regulation; and
- appropriate monitoring.

That the market performs efficiently – both in terms of prices and delivering the environmental outcome sought - is the bedrock upon which public and participant acceptance of market-based environmental schemes rests. Without this, public (and political) support will ultimately be withdrawn.

In the Australian context, even the largest environmental markets have struggled to develop into "serious" and efficient markets.

For example, within the MRET market there has been considerable turnover of brokers. Existing financial market brokers have attempted to broker REC trades only to find insufficient volume to sustain their activity.[1] An early attempt to introduce electronic exchange based trading (the GEM[2]) also suffered from lack of volume, and eventually closed down.

It is interesting to note that the Office of the Renewable Energy Regulator (ORER)[3], the operator of the MRET scheme, did not formally monitor these developments. It does not have a mandate to take into account how these developments might have impacted market efficiency or what ORER and others may have been able to do to improve market performance.

In the case of MRET no other government organisation has a mandate to consider these issues either.

It is interesting that following the closure of the GEM, no government agency felt it was their role to produce a "State of the Market" analysis asking what this development meant for the performance of the MRET market, and considering what actions – if any – the Government should consider as a result.

This is in sharp contrast to the role of the Reserve Bank of Australia (RBA) in respect of financial markets, where the RBA has a specific mandate to monitor financial system stability and performance, and, if required, to take action to support/stabilise the system. The RBA

[1] The Australian environmental markets have seen the exit of both the dedicated environmental broker CO2e.com, and the electricity & environmental products desk of Tullet Liberty. There are now less than half a dozen brokerage firms which endeavour to provide two-way pricing on RECs, and these groups normally offer environmental product brokering off the back of significantly greater brokering activity in the markets for electricity and other commodities such as Coal.

[2] The "Green Electricity Market" (GEM) consortium developed an electronic exchange with integrated settlement for RECs, and after two years of operation closed in 2003 due to lack of volume. The Sydney Futures Exchange some years previously attempted to launch an exchange traded "carbon contract", a process it was forced to stop when it became clear that contract volumes would not reach critical mass.

[3] Refer www.orer.gov.au

also actively drives reforms to improve efficiency. For example, when the RBA identified that slow settlement processes presented both an efficiency cost and a potential for financial system instability the RBA moved to developing and implementing the Real Time Gross Settlement system which reduces transaction costs and largely removes credit risk.

These issues are discussed in greater length in the AFMA submission to the MRET review. (Australian Financial Markets Association 2003)

Thus one lesson from the financial markets for the environmental markets is that there should be an independent agency with a mandate to effectively monitor the markets, to assess them against their stated policy aims, and to consider how to encourage the development of an open, transparent, liquid and efficient set of spot and forward markets.

Within a defined framework such an agency would formally monitor the overall effectiveness of the market schemes in terms of achieving stated macro policy goals. This agency should also have a mandate to develop and propose market changes against a known framework, which would include mandatory consideration of the impact of such changes on forward/derivative markets.

AFMA would make the following key points.

- **Market monitoring is an important aspect of an efficient market. The monitoring arrangements should be an integral part of the overall design of any environmental market.**
- **Regulatory risk is unavoidable, but can be managed by having rule changes and monitoring conducted within a known framework.**
- **An independent government agency should be charged with a broad mandate to watch the market, broad (but specified) terms of market performance and efficiency against policy objectives.**

With regard to this submission, we caution ***that any proposed design should be specifically reviewed for the likely implications for forward/derivative markets.***

Because of the complexity of interactions in a market, there is considerable value in proposed designs being experimentally tested. It is much cheaper to test market institutions in a laboratory setting than by attempting to run a real life experiment with an entire industry.

Key points:

- **A key criteria for the design of the tradeable instrument should be enabling the efficient operation of the forward market.**
- **Market designs should be experimentally tested prior to implementation.**

Issues For Consideration identified in the Consultation Paper:

The background paper raises a considerable number of issues for consideration. This AFMA submission relates to the following subset of the issues raised, in particular the following.

- Compatibility with the Kyoto Protocol and its flexibility mechanisms
- Compatibility with other international trading frameworks, including the EU emissions trading scheme

- Capacity to promote investment certainty, including issues of target, cost or penalty levels and timeframe
- Capacity to minimise administrative costs to both the scheme administrator and participants (including ease of measurement and the number of parties involved)
- Ability to accommodate a range of offsets, including carbon sinks
- Capacity to harmonise and/or integrate with existing schemes, such as NSW and
- ACT greenhouse benchmarks, Commonwealth Mandatory Renewable Energy Target (MRET) and Qld 13% Gas Scheme
- The need to accommodate and not disadvantage new entrants
- The need to ensure liquidity within the market (with sufficient buyers and sellers)

Questions for stakeholders from Issues for Consideration

- Are there any additional criteria that should be considered?
- Which criteria do you consider a priority and why?
- Which criteria do you consider unimportant and why?

Additional Criteria that should be considered:

AFMA would identify the following additional criteria that should be considered.

- **Consistency with existing financial market and corporate regulatory structures, management approaches and instrument designs.**
- **Promoting the development of carbon trading as a mainstream part of the financial industry.**
- **Likely implications of the spot market design for the associated forward/derivative markets.**

Why should these additional criteria be considered?

To achieve both short term allocative efficiency, and to drive appropriate long term investment decision making, decision makers anywhere in the economy should be able to easily know and transact on the price of carbon, both spot and forward in an open, liquid and transparent market.

Ultimately greenhouse emissions should be a commodity in the same way as wheat, wool, or shares, and fund managers should be no more unwilling to trade or invest into "carbon" than they currently are to deal stock of CBA or BHP-Billiton.

To reach the stage where a recognised "carbon unit" trades widely – both on exchange and Over-The-Counter, with a range of both spot and futures products, requires the environmental markets to move into the financial markets "mainstream".

To this time environmental markets have been implemented and operated well away from the "mainstream" of financial markets. The market designers and implementers are drawn from government agencies with limited experience in existing financial markets, and lessons on design and regulation from those markets are not being heeded in the environmental markets.

A useful reality check for policy makers engaging in market design should be "would I be happy with my superannuation fund investing in this market?"

Another rule of thumb for instrument design would be "is there a similarly designed instrument somewhere else in the financial markets which is trading successfully?"

Accordingly, AFMA suggests that **consistency with existing financial market regulatory structures, and facilitating the growth of emissions trading as a mainstream financial market are important design criteria.**

Proposition 1: That a cap and trade approach be used as the basis for scheme design

AFMA has responded to the following questions in respect of Proposition 1.

Responses to Questions for stakeholders in respect of Proposition 1

- To what extent does an Australian scheme need to be consistent and compatible with other schemes internationally (and therefore facilitate linking to those schemes)?

In general terms, markets work better when they are larger. In the case of greenhouse emissions, the underlying unit (carbon emissions however defined) is ultimately a globally fungible commodity (and represents a global problem). Given these characteristics ultimately (meaning in the long term) it would seem inevitable that a global market place will develop, and hence all other factors being equal opting for consistency and compatibility with international developments at an early stage is valuable.

Specifically, as a small (but carbon intense) economy, to be inconsistent with international markets presents a significant **regulatory risk**, since over time any Australian only scheme that was fundamentally incompatible with global norms would appear likely to be changed or revoked.

This does **not** mean that an Australian design needs to blindly follow overseas leads, and cannot be tailored to Australian conditions. Rather it means that Australian developments should be conducted with a view to ensuring that later transitions to ever broader and wider markets can be achieved with a minimum of redesign.

Some analogy may be drawn with regulation of the financial sector. Australia is in the final stages of developing a wide range of financial industry reforms to implement the international BASEL2 accords. Whilst individual countries are implementing the requirements of those accords in their own way, it is to a set of consistent standards.

Similarly Australia's corporate regulatory structure – on a wide range of areas such as Accounting Standards and corporate law - is developed with a view to the approaches taken in other comparable countries around the world.

There is a generalised trend in the financial markets towards more global and more integrated markets rather than less.

It would be surprising if environmental markets – particularly for a globally fungible product such as greenhouse emissions – were to benefit from moving in the opposite direction.

- What are some of the opportunities and risks associated with linking to other international schemes? Is it possible to take advantage of the opportunities, while minimising Australia's exposure to the risks involved? How might this be achieved (eg. through single desk export arrangements)?

AFMA does not at this time have any specific position regarding the benefits of linking to any particular international scheme. We support internationally consistent design because it gives capacity to be part of a large market. This promotes liquidity and the development of an efficient marketplace.

AFMA sees considerable benefit – in general terms – in allowing international linking.

In general terms, Australia has always been economically integrated into a global economy, and the best risk mitigation is to have open efficient markets with a liquid forward contract market. Attempts by governments to manipulate market outcomes through market interventions such as single desk export arrangements have a fraught history.

- What elements of a cap and trade scheme are required to ensure compatibility with other international schemes?

From a market trading/linking perspective, there are no mandatory elements required to ensure compatibility – what matters is that there be known "rules" for mutual recognition/fungibility/exchangeability between international schemes.

For example, the EU may rule that Australian long-term permits are not admissible in the EU ETS or that certain types of Australian offsets are not admissible or that Australian permits are exchangeable for EUAs on a 2-for-1 basis (if the Australian cap is judged too loose].

However, compatibility for market trading is, in practice, most easily satisfied if such "rules" are few in number and not complex. This then drives scheme design toward:

- Common unit of account = 1 tonne CO2e
- Common banking/expiry rules, compliance periods
- Common/similar source coverage
- Common/similar offset coverage

Again, analogy and experience from the financial markets may be drawn upon, with the development of arrangements for cross border financial settlement.

- What elements of the European emissions trading experience should be taken into consideration in establishing the broad framework of the scheme?
- Has your organisation had any experience of the European emissions trading scheme or other international schemes? If so, what lessons do you believe an Australian scheme might draw from that experience?

Some AFMA members are active participants in the EU ETS, and have identified the following elements as being worth noting.

- The Over The Counter market developed of its own accord without govt intervention/stimulus and agreed on dealing conventions, master agreements, standard dealing dates etc.

- The market attracted market-makers/brokers who commenced operations and drove new product innovations. A range of financial instruments (such as swaps/options/repos/average-rate forwards etc) are becoming available based on the EU ETS units.
- ET markets likewise developed as pretty much forseen eg exchange-traded spot and futures, clearing arrangements etc
- Sufficient standardisation and simplicity of the instrument traded effectively underpinned efficiency of market development

However, particular lessons from the EU ETS experience would include:

- Tremendous time-gaps between different Member States for announcement/finalisation of EUA allocations lead to a market buffeted for some time by regulatory/political risks which undermined the credibility of the market, the market price and discouraged/delayed participation.
- Similarly delays in building/implementing registries (some of which are still not completed) has hindered market performance.
- Unclear and differing tax/legal/compliance/regulatory treatments also hindered market development
- Inconsistent coverage/opt-ins & outs and inconsistent sectoral treatments affected level playing field, and may ultimately effect market performance.

We do note that some of the above issues are less likely to occur in an Australian ETS that takes a national sectoral allocation and would exist with minimal, state differentials in tax/legals etc

Proposition 2: That the scheme be national and sector based

Questions for stakeholders

- Is national consistency an appropriate goal?

For the reasons outlined previously in respect of consistency with international markets, **yes**, national consistency is an appropriate goal.

- What institutions would be required for a nationally administered scheme?

The following is a relatively obvious list of required institutions.

- Single national registry
- Single national scheme administrator
- Single national scheme policy/rules oversight body.
- Single national accreditor of verifiers
- A common appeals process/dispute resolution – ie which forum under which jurisdiction if entity wished to challenge size of allocation?
- “Single national“ does not necessarily preclude contracting-out to existing infrastructure eg NSW GGAS

AFMA would draw attention to the experience of developing a National Electricity Market out of what was essentially a set of State based electricity sectors. Despite various difficulties, overall the NEM development institutions have proved functional, and present a working model.

In particular, the importance of separating roles of implementation/operation from the roles of oversight/rule changes, and the roles of the States in the regulatory arrangements are worth closely examining.

Proposition 3 : That in setting the cap, consideration be given to the overall national emissions abatement target, and how the abatement responsibility is allocated between sectors covered by the scheme and those outside the scheme

- Should scheme caps and/or economy wide targets be set beyond the first commitment period of the Kyoto Protocol? For example, are medium to long term scheme caps and/or economy wide targets an appropriate means for providing investment certainty? Are there other means of providing reasonable certainty for investors and what are their relative merits?

Yes.

From a market perspective long-term caps/targets are important. A 5yr scheme is too short to lead to the investment/renewal of long-term large emitting assets (or equivalent scale offset investments) and hence the price will be set by the low-hanging fruit, quick implementation reductions and offsets (and, in the extreme, plant shut-downs/mothballing).

As discussed elsewhere in this submission AFMA feels that to function well the known scheme life should be (at least) in the order of 15 years.

Proposition 4: That the scheme initially cover the stationary energy sector

AFMA submits that some analogy with the implementation of the Retail Contestability in the electricity market can be made.

The retail electricity market was implemented in staged tranches, starting with the largest customers. This allowed for the development of market infrastructure, skills and processes with a relatively small number of large and well informed customers. This then lowered the transaction costs and complexity as the larger number of smaller customers were introduced into the market over time.

AFMA submits that since it is clear that ultimately some form of emissions market will develop, that a faster start with a known design is preferred to a delayed start on a broader base. This is because we feel that the benefits of regulatory certainty and experience will outweigh the cost of having – at least initially – a narrower market with lower volumes.

Accordingly AFMA submits that a scheme commencing with the stationary energy sector is appropriate.

Proposition 6: That permit allocation mechanisms and permit design

AFMA submits that the best risk management for both market participants and the government itself is the existence of a liquid and transparent market, with full range of spot and forward market products.

There has been previous emissions market experience showing that significant market dynamic impacts occur when organisations who have been administratively allocated permits are faced with an auctioning process. The Virginia NOx market provides a particular case study, both for the legal cases brought and the significant price changes and trading volume impacts following the auctioning. A copy of a newspaper clipping in respect of this auction is attached.

Questions for stakeholders from Proposition 6

- How long should permits be allocated for? One year or more? And why?

In an efficient market with low transaction costs and rational participants, long and short term permits would both trade, and appropriate price relationships would hold between the two. Under that assumption the allocation would be relatively unimportant.

However, experience of environmental markets to date suggests that to this time the reality is some distance from the efficient market postulated above.

The trading experience of the Hunter River Salinity Trading Scheme is worth consideration – in that this market also trades a combination of long-term and short-term instruments. At least initially there was difficulty with trading of the long-term instruments, due to a combination of "buy and hold" strategy, and the difficulty of actually valuing an illiquid instrument of an unusual design.

Overall, AFMA submits that given the relatively low volumes, and tendency of new and developing markets to be inefficient and lightly traded, the balance of probabilities is that having permits running in length for more than a year or two will lead to lower liquidity and reduced price discovery.

However this cannot be definitively established at this time.

If the government wished to provide long term certainty, this would be best done NOT through the issue of long-term permits, but **rather in the form of a financial forward contract, similar in design to a 15 year Government Bond**, where the annual coupon payment would be the delivery of an annual permit (or cash settlement at an appropriate index).

Such forward contracts are simple and well known financial instruments, would be easily tradeable, and not require significant innovation to deliver, while still providing certainity to investors and liable parties. They also have the advantage of clearly delineating the Government's financial and legal liabilities.

This is not because long term permits (which we consider to mean a permit giving the right to emit for 3 years or more) is inherently unworkable – in an efficient and well developed market the market should successfully price such a long term permit.

However if the scheme is based on a annual liability of some form, it is intuitive for the base compliance instrument to be an annual instrument. This implies that a long-term permit would be supplemental to this, and would mean that at least two forms of "permit" are traded. This is increasing complexity by introducing a novel "long term" instrument in parallel with the short-term instrument, and seems to offer nothing extra by way of policy outcome in return for this complexity compared to using a more standard form of long term financial contract and a single compliance instrument

Questions for stakeholders from Proposition 6

- If permits were to be allocated by auctioning, what kind of auctioning system should be used and why?
- Should there be a transition from one system (eg administrative allocation) to another (eg auctioning)?
- How would the method of allocation impact on the operation of the emissions permit market? Would it impact trading and market liquidity?

Under the conditions that apply in relatively under-developed markets, a uniform clearing price based auction is generally acknowledged as providing improved efficiency and encouraging genuine value revelation by bidders. It is for these reasons (among others) that the uniform clearing price approach was adopted for the implementation of the National Electricity Market.

There is a multiplicity of potential auction designs, and at this stage (with the nature of the instrument being undefined) no particular stand-out approach is identifiable. As previously mentioned, any **proposed auction design should be experimentally tested before implementing**.

Again the experience of the Virginia NOx market is worthy of consideration in respect of these questions. There have been a number of environmental markets that have had similar experiences – namely that as more "free market" mechanisms are applied following administrative allocation considerable price and volume impacts are observed. This is because of the obvious fact that the initial administrative allocation will almost certainly not match the market equilibrium.

The core experience is that the nature of the initial allocation DOES significantly affect the subsequent market performance.

On Going Dialogue

AFMA is well placed to assist in the development of a multi-state emissions trading scheme and would be happy to work with the Interjurisdictional Working Group as appropriate in its development.

To discuss any elements of this submission, please contact:

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APPENDIX A – AFMA members

List of AFMA Members, and the persons on the AFMA Environmental Products Working Group.

AFMA Members include

Full Members

ABN AMRO Bank NV
Adelaide Bank Limited
AMP Henderson Global Investors
AMP Capital Investors
ANZ Banking Group Limited
Arab Bank Australia Limited
Aurora Energy Pty Ltd
Australian Office of Financial Management
AWB Services Limited
Bank of America NA
Bank of China
Bank of Queensland
Bank of Tokyo-Mitsubishi
Bank of Western Australia Limited
Bank One NA
Barclays Bank PLC
Bendigo Bank Limited
BNP Paribas
BOS International (Australia) Limited
Citigroup
CMC Group plc
Commonwealth Bank of Australia
Country Energy
Credit Agricole Indosuez Australia Limited
Credit Suisse First Boston
Credit Union Services Corporation (Australia) Limited
CS Energy
Delta Electricity
Deutsche Bank AG Australia
Dresdner Bank AG Australia Branch
Duke Energy Australia Trading & Marketing Pty Ltd
Edison Mission Energy Australia Pty Ltd
ENERGEX Retail Pty Ltd
EnergyAustralia
Enertrade
Eraring Energy
Ergon Energy
Goldman Sachs JBWere Capital Markets Limited
HSBC Bank Australia Limited
Hydro Electric Corporation
ICAP Australia Pty Ltd
ING Bank (Australia) Limited
ING Bank NV Sydney Branch
Integral Energy Australia Corporation
InterGen (Australia) Pty Ltd
J B Were Capital Markets Limited
JPMorgan Chase Bank
Loy Yang Power Management Pty Ltd
Macquarie Bank Limited
Macquarie Generation
Merrill Lynch (Australia) Pty Ltd
Mizuho Corporate Bank Ltd Sydney
N M Rothschild & Sons (Australia) Limited
National Australia Bank Limited
Nomura Australia Limited
Northern Territory Treasury Corporation
NRG Flinders
NSW Treasury Corporation
OCBC Bank
Origin Energy
Prebon Yamane Money Markets
Queensland Investment Corporation
Queensland Treasury Corporation
Rabobank Australia Limited
RBS (Australia) Pyt Ltd
Royal Bank of Canada
SFE Corporation Limited
Société Générale Australia Branch
Snowy Hydro Limited
South Australian Government Financing Authority
Southern Hydro Partnership
St George Bank Limited
Stanwell Corporation Limited
Sumitomo Mitsui Finance Australia Limited
Suncorp Metway Ltd
Tarong Energy Corporation Limited
Tasmanian Public Finance Corporation
Telstra Corporation Limited
TFS Australia Pty Ltd
The Australian Gas Light Company
The Toronto Dominion Bank Australian Branch
Travelex Limited
Treasury Corporation of Victoria
Tullett Liberty Pty Ltd
TXU Trading
UBS AG, Australia Branch
UFJ Australia Limited
United Overseas Bank Limited
Western Australian Treasury Corporation
WestLB AG
Westpac Banking Corporation
Yallourn Energy Pty Ltd
Yieldbroker Pty Limited

Partner Members

Allens Arthur Robinson
Associate Members
Australian Energy Services Pty Ltd
Hazelwood Power
Investec Bank (Australia) Limited
Rio Tinto Limited
State Electricity Commission of Victoria trading as Vicpower Trading
TIO Finance
Baker & McKenzie
Blake Dawson Waldron
Bloomberg
Clayton Utz
Corrs Chambers Westgarth
Ernst & Young
Freehills
Future Platform
Henry Davis York
Hewlett Packard
Johnson Winter & Slattery
KPMG
Mallesons Stephen Jaques
Minter Ellison
OMX Technology
Phillips Fox
BT Syntegra

Affiliate Members

Australian Prudential Regulation Authority (APRA)
Australian Securities & Investment Commission
Australian Taxation Office (NSW)
Commonwealth Treasury
International Securities Market Association (ISMA)
International Swaps & Derivatives Association (ISDA)
National Electricity Market Management Company
Reserve Bank of Australia
Weather Risk Management Association

AFMA ENVIRONMENTAL PRODUCTS WORKING GROUP MEMBERS

David Brand	Hancock Natural Resource Group Australasia Pty Ltd
David Hemming	Department of Energy, Utilities and Sustainability (NSW)
Thomas Virgona	TFS Australia Pty Ltd
Josh Carmody	Baker & McKenzie
Forrest Moebes	ICAP Australia Pty Ltd
Robert Fowler	IPART
Craig McBurnie	ABN AMRO Bank NV
Fiona Melville	Johnson Winter & Slattery
Graeme Dennis	Johnson Winter & Slattery
Petrea Bradford	Origin Energy
Astrid Raetze	Baker & McKenzie
Raymond Yeow	Westpac Banking Corporation
Greg Foy	EnergyAustralia
Cameron Fisher	Snowy Hydro Limited
Stirling Habbitts	KPMG
Cheryl Smith	Energetics (Sydney)
Ken Edwards	Next Generation Energy Solutions
Stephen Davy	Hydro Tasmania
Adam Kirkman	Ernst & Young
Marc Barrington	The Australian Gas Light Company
Michael Stone	Southern Hydro Partnership
Trent Morrow	Enertrade
Peter Sherman	ENERGEX Retail Pty Ltd
Allison Hancock	Minter Ellison
Alexander Fowler	Ergon Energy
Mark White	Blake Dawson Waldron
Simon Cunningham	Energy Developments Ltd
Jodi Buckle	Enertrade

APPENDIX B – clipping regarding the Virginia NOx market

This clipping has been included to provide some background to the experience of the Virginia NOx market. This market was initially administratively allocated, with a mechanism to move to later clawing back and auctioning a proportion of the allocation. The mechanism chosen was highly contentious, and led to considerable legal and political challenges. When the auctions were finally conducted the market price was considerably above expectations (leading to a wind-fall profit to the State of Virginia), and also resulted in a large upswing in trading volumes over-the-counter.

AFMA submits that this experience contains valuable lessons regarding allocation mechanisms and the impacts on the market performance from the allocation mechanisms chosen.

Pollution auction tops forecast
State pockets $10.5 million in the sale of allowances to emit nitrogen oxides
BY GREG EDWARDS
TIMES-DISPATCH STAFF WRITER
Friday, June 25, 2004

A state auction of nitrogen-oxide pollution credits for industry has raised much more money for the state budget than expected.

The auction, held yesterday, raised roughly $10.5 million after expenses of $200,000, said William M. Shobe of the Virginia Department of Planning and Budget. The state had projected that the auction would raise about $8.8 million.

"It was great," Shobe said. The credits sold for well above their market price on Wednesday, he said.

Nitrogen oxides are a key pollutant that creates smog. The Environmental Protection Agency created a system of allowances - the right to pollute at certain levels - as part of a plan to cut nitrogen oxide emissions by two-thirds in a 22-state region that includes Virginia.

The General Assembly set aside 5 percent of the state's allowances for use by new power plants and factories. The state Department of Environmental Quality approved the auction of those allowances for 2004 and 2005.

Power-plant developers objected to the auction and thought they should get the allowances for free, but were unsuccessful in opposing the plan before the DEQ. They then turned their attention to the General Assembly.

Developers argued that auctioning the allowances would discourage power-plant development. Lawmakers this year passed a bill, sponsored by Sen. Thomas K. Norment Jr., R-James City, that forbids the auction of any allowances beyond those auctioned yesterday.

The auction results, however, might cause lawmakers to rethink the policy of handing out the allowances at no charge.

Any ideas? Staff writer Greg Edwards can be reached at (804) 649-6390 or gedwards@timesdispatch.com

This story can be found at:
http://www.timesdispatch.com/servlet/Satellite?pagename=RTD%2FMGArticle%2FRTD_BasicArticle&c=MGArticle&cid=1031776243078&path=!business&s=1045855934855

REFERENCE:

Australian Financial Markets Association (2003). Submission to the MRET Review. Canberra, MRET Review**:** 9.