CONTRACTS AND CLAUSES FOR CARBON TRADING AND CARBON RISK MANAGEMENT

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Australia's recent ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and the announcement of the introduction of a national Australian Emissions Trading Scheme (AETS) for commencement by 2010, have heightened the need for businesses to focus on the risks and exposures presented to their business by greenhouse emissions, particularly in respect of forward contracting.

This article looks at two principal areas:

- *contracts for the trading in environmental instruments relating to greenhouse emissions, colloquially known as "carbon trading", and*
- *"pass-through" clauses in contracts for forward trading in other commodities or services, where the cost or value of the commodity or service will be impacted by the introduction of an Australian Emissions Trading Scheme and the parties wish to address that risk.*

1. CARBON TRADING CONTRACTS

1.1 The Carbon Products

The paper by Louis Chiam published in this edition of the Journal describes a number of the carbon trading products that are already traded in Australia, including certified emission reductions (CERs) from clean development mechanism (CDM) projects, greenhouse abatement certificates (NGACs) under the New South Wales Greenhouse Gas Abatement Scheme (GGAS), Greenhouse Friendly credits under the Australian Greenhouse Office scheme, and other voluntary emission reduction offsets (VERs).

There are also gas electricity credits (GECs) under the Queensland Gas Electricity scheme; emission allowances under the European Union emissions trading scheme (EUAs), emission reduction units (ERUs) that might be able to be traded under joint implementation (JI) schemes under Article 6 of the Kyoto Protocol; and (in anticipation of the introduction of the AETS) allowances and offsets under the AETS.

In addition to the transfer of the underlying products, there are also transactions occurring on a derivative basis, hedging against potential movements in the cost of the carbon products. Such transactions are sometimes referred to as "carbon hedges" or "carbon swaps".

1.2 Legal Nature of the Carbon Products

In order to effectively document transactions in these carbon products, it is important to understand their legal nature. Are they within some other category of legal right or obligation with which we are familiar?

Each carbon product tends to fall into one of several broad categories:

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(a) **Creator post-abatement covenants** – these instruments are essentially promises by the creator or issuer of the carbon product that the creator has already done something, or already not done something, which has given rise to a carbon abatement. The promise is made to the holder of the instrument, for valuable consideration received. The issuer covenants that it has not made, or will not make, a similar promise to others in respect of the same abatement. The issuer promises that the holder is entitled to make representations that the abatement was done for the benefit of the holder of the instrument. The holder of the instrument is entitled to assign the instrument to third parties without consent. Sometimes the assignment permission is conditional on the assignor passing on to third parties certain disclosures, or obtaining from third parties certain undertakings. In respect of some instruments, such as CERs or Greenhouse Friendly credits, the issuer warrants that the abatement activity has been certified, approved or audited by some external process, to a certain specification or standard. These covenants are contractual in nature, and are essentially a chose in action enforceable by the grantee of the covenant, and its permitted assignees. CERs, ERUs and VERs tend to be in this category.

(b) **Creator pre-abatement covenants** – These are similar to the preceding category, with this difference – the abatement activity has not yet occurred, or the abatement activity has not yet been completed. Most often these covenants relate to promises to sequester carbon in forests (or underground reservoirs), with the sequestration task to continue for many years (often exceeding 100 years) into the future and beyond the issue of the instrument. The issuer takes the holder's money up front, promises to plant a forest, and promises to sequester a certain amount of carbon for a certain period (that is, by not cutting down trees). The issuer promises that this forestation and sequestration activity will be done for the benefit of the holder of the instrument. The moneys paid by permit holders are pooled and used in a common enterprise to plant and manage the forest. The management of the forest and sequestration of the carbon gives rise to a carbon benefit (for instance under the Greenhouse Friendly scheme), which benefit is conferred on the permit holders. This is also a contractual covenant, a chose in action. One difference from the preceding category of instrument is that the holder is effectively investing money and relying upon the issuer's future performance of its covenants to receive a benefit, which may cause this product to be classified as a "managed investment scheme" product under the *Corporations Act* (s 9).

(c) **Government licences and allowances** – Under cap-and-trade emission schemes such as the European Union scheme and the proposed AETS, emissions from facilities within the covered sectors (such as power stations and large industrial plants) are prohibited or made unlawful, unless emission allowances equivalent to the actual emissions of the plant are surrendered. The emission allowances are effectively licences from the Government to do what would otherwise be prohibited or unlawful. The licences may be allotted by the Government free of charge, or the licence may be allotted for valuable consideration following some auction, ballot or tender process. This is a form of statutory licence, which is usually permitted to be assigned in accordance with the statutory rules for transfer. There is usually a registry of allocated licences and their current registered holders. The form of transfer, and the process for delivery of the instrument upon assignment, are usually governed by the legislation and registry rules.

(d) **Government offset allowances** – These are similar to the preceding category, but with this difference – the Government does not just create the allowance and issue it, but instead the Government requires the initial holder to prove (or certify) that it has conducted some qualifying abatement activity before the offset allowance is created. GECs under the

Queensland scheme and NGACs under the GGAS are examples of this. Also possibly offsets under the proposed AETS. Once created and registered, the offset gives rise to an allowance to do what otherwise would be unlawful, being some form of Government licence.

(e) **Government tax credits** – Sometimes, rather than prohibiting an activity being carried out without a licence, the Government imposes a taxation regime upon the activity. The carbon permits would allow the activity to be carried on without being subject to the tax, or carried on but subject to a lower rate of tax. The carbon permits in this case are a form of tax credit rather than a licence. The promise by the Government that the permit holder may transfer the permit, or surrender it to obtain a credit against the carbon tax that would otherwise be payable, is probably a statutory chose in action enforceable against the Government and its registrar. Renewable energy certificates (RECs) under the Australian Mandatory Renewable Energy Target are an example of such a tax credit. RECs are also an example of a credit being created by certifying to the Government that certain accredited behaviour has been undertaken, rather than being created by allotment and sale.

1.3 Standard Documentation used for Trading

For projects where the carbon instrument is not yet created, or the project is not yet accredited and the value or status of the carbon instrument is not yet known, the relationships between the project developer and potential off-takers of the carbon instrument typically require bespoke documentation to deal with the particular circumstances of the project, and will be customised according to the status of the project and the potential directions that it might take.

The contract (often known as an "emissions reduction purchase agreement", or "ERPA") will need procedures to determine the nature of the carbon instrument (sometimes there are multiple possible schemes to choose from, and the off-taker is given a right to elect under which scheme the project will be accredited), the standards to which the carbon abatement will be audited and/or certified, timelines and milestones for delivery of the project and its certification and qualification, and procedures to deal with potential changes to schemes and governing legislation. Options to swap out of one form of instrument and into another form of instrument are often included. The volume is also often flexible according to the ultimate output of the project.

For trading where the project is already established and accredited, or where there is no specified source project and instead parties are simply trading carbon instruments in a generic form, then the documentation used for trading is becoming more standard.

The International Emissions Trading Association (IETA) has published a form of contract for trading in EU emission allowances (EUAs). This form was largely based on the ISDA Master Agreement, but cut down and confined to trading in EUAs. The latest version of the IETA document publicly available was published in 2005. More recently the IETA form of contract for EUAs has been harmonised with the confirmation form published by the International Swaps and Derivatives Association (ISDA), and the ISDA confirmation form is more likely to be adopted going forward.

The ISDA form of contract for EUAs is the most up-to-date,[1] and includes modifications for trading in phase 2 of the EU emissions scheme (which commenced in January 2008). The ISDA EU form also incorporates facility for trading Kyoto Protocol CERs and ERUs, for surrender as

[1] Currently available at http://www.isda.org/cgi-bin/_isdadocsdownload/download.asp?DownloadID=317.

credits into the EU scheme. The ISDA form of contract for EUAs permits physical spot, physical forward and option trading in the EU scheme allowances and Kyoto credits.

ISDA has also published the "US Emissions Allowance Transaction Annex", which includes provisions for trading in Carbon Financial Instruments on the Chicago Climate Exchange.

In Australia, the Australian Financial Markets Association (AFMA) has published a form of confirmation for use under the ISDA Master Agreement in Australia, and this currently includes provisions for trading RECs, GECs, and NGACs. This form of confirmation is readily adaptable for trading in emission allowances and offsets under the proposed AETS, once legislation for that scheme is available.

1.4 Specific Clauses and Issues

Key issues which are dealt with under the ISDA form of contract for EUAs include:

(a) **Delivery mechanisms** – The clauses governing delivery of the carbon product provide for transfer to and from counterparties' accounts in the allowance registries, and vary from carbon product to carbon product depending upon the nature of the registry and its procedures.

(b) **Damages** – Failure to deliver on the appointed day is not an event of default, but gives rise to a payment obligation. The obligation is to pay to the buyer its cost of purchasing replacement carbon products in the market on the delivery date, to the extent that it exceeds the contract price in the transaction. A failure to pay the buyer's replacement cost, once ascertained, constitutes a payment event of default under the ISDA Master Agreement.

(c) **Penalties** – Usually, a non-delivery of the carbon product will give rise only to the replacement cost damages, however the ISDA document does provide for nomination of an Excess Emissions Penalty (EEP) period, which is usually specified to be the few days preceding a surrender or acquittal date under the emissions scheme. Where the delivery is required during the EEP period, and the seller fails to deliver, the seller is exposed to the cost of any emission scheme penalties which the buyer incurs, after the buyer has acted reasonably to purchase from alternative sources and has been unable to avoid the penalty (either imposed directly on the buyer or which the buyer is liable to pay to a downstream purchaser).

(d) **Settlement force majeure** – There is a concern in the European Union, and also generally in respect of the Kyoto Protocol countries, that the required national registries may not be implemented in time for the required delivery date under a transaction. The solution in the ISDA document is for settlement to be deferred until the registry becomes available, with the buyer paying an additional interest cost on the purchase price (which payment is deferred until settlement becomes available).

(e) **Scheme termination** – There is a risk, particularly with longer dated forward transactions, that the Scheme may be terminated prior to the maturity date of the transaction. The ISDA document's solution to this is that upon termination of the scheme, any further settlement delivery obligations are terminated on a "no-fault" basis, as are payment obligations. Any pre-payment that has occurred, such as a deposit or premium instalment in respect of the future deliveries, is to be refunded. No other amount is payable in respect of the early termination of the transaction.

2. CARBON RISK MANAGEMENT CLAUSES

2.1 Direct Exposure to Carbon Costs

If an emissions trading scheme such as the AETS is introduced into Australia, parties may have a direct or indirect exposure to such schemes.

Operators of facilities that emit greenhouse gases in the covered sectors (proposed in Australia to be most sectors other than agriculture and forestry) will have a direct liability to surrender emission permits or allowances equivalent to their emissions. Some operators (such as petroleum producers or retailers of liquid fuels and gases) may also have a direct liability imposed on them in respect of the emissions occurring from combustion of the fuels by their customers.

To cover this direct liability, under the proposed AETS parties will need to acquire their permits by purchase from the Government pursuant to various auctions to be held, or acquire their permits from other purchasers in a secondary market. Some unduly disadvantaged emitters or energy intensive trade-exposed industries may have free or discounted permits allocated to them.

This direct liability gives rise to a permit cost, which is likely to increase costs for producers which have emissions.

A person that is not liable to surrender permits under an AETS may nevertheless have an indirect exposure to the costs of the AETS. Parties that purchase products from emitters, may find that the prices of those products may rise in line with the increase in the costs of production.

Also, where long-term contracts for the purchase of products are being entered now for a period that may be covered by the AETS, emitting parties may seek to cover themselves now by express provision in the contract to deal with the increased direct or indirect costs. Such clauses are often called “pass-through” clauses.

2.2 Pass-through Clauses

The most commonly encountered pass-through clauses are often set out as “change of law” provisions. These provide for the price of a commodity or service to be amended or reviewed if, after the date of the agreement, there is a change in law which impacts upon the cost of production of the commodity or service.

As an AETS will be governed by legislation introduced by the Commonwealth Government, the commencement of the governing legislation is likely to give rise to an event under a change of law clause.

Until now, many contracts in Australia have specifically addressed the possibility of the introduction of a carbon tax. However, unless the carbon tax clause is very widely defined it is unlikely to be triggered by the introduction of an emissions trading scheme, and the more general provisions of a change in law, rather than change in tax, clause are likely to apply.

Difficulties with the use of such clauses include: (a) they are usually of little use if the contract is entered after the date of enactment of the legislation; (b) they would need to cover the situation where the costs of an AETS are passed through indirectly via a chain of contracts, rather than directly on the contracting party; (c) the calculation of the cost arising from the introduction of the legislative measure; (d) how and when the cost is to be calculated and paid; (e) how the cost will be apportioned over multiple contracts (some of which may have pass-through clauses and others of which may not); (f) how the cost will be allocated to each unit of production or unit of commodity being sold; (g) whether there are abatement activities or other measures which the

seller could take to reduce the cost impact of the scheme; (h) whether free or discounted allocations of emissions permits are to be taken into account in the determination of the producer's cost; and (i) whether, given that the scheme has been announced and anticipated for some time, the anticipated cost of the measure is already built into the unadjusted original price of the product or service.

2.3 Hedges for Electric Energy under the ISDA Master Agreement

The potential impact of an AETS and its relationship to a standard tax pass-through clause is illustrated by consideration of a standard electric power price hedge.

An "over the counter" (OTC) cash-settled commodity swap documented in Australia for the purpose of hedging movements in the spot price of electric power will usually be documented under the standard ISDA Master Agreement. Is the introduction of an AETS a "Market Disruption Event" for the purposes of the ISDA Master Agreement?

"Market Disruption Events" are not referred to in standard form of the 2002 ISDA Master Agreement. To apply to a Master Agreement, they must be inserted by election by the parties. It is usual for parties documenting commodities swaps to elect to apply the 2005 ISDA Commodities Definitions (or the earlier 1992 ISDA Commodity Derivatives Definitions).

If the parties elect to adopt the 2005 ISDA Commodity Definitions, they can specify which Market Disruption Events are to apply.

If the parties adopt the 2005 ISDA Commodity Definitions, but fail to specify which Market Disruption Events are to apply, then the following Market Disruption Events are deemed to apply to their commodity transactions (other than bullion transactions): "Price Source Disruption", "Trading Disruption", "Disappearance of Commodity Reference Price", "Material Change in Formula", and "Material Change in Content".[2]

It is common in Australia for parties documenting derivative transactions where the commodity is electric energy, to elect to apply, in addition to several other Market Disruption Events, the Market Disruption Event which is entitled "Tax Disruption".

"Tax Disruption" is defined in the 2005 ISDA Commodity Definitions. It is common in Australia for parties documenting derivative transactions where the commodity is electric energy, to elect to stipulate that the definition of "Tax Disruption" in the 2005 ISDA Commodity Definitions is amended by inserting after the word "sales" the words: "carbon tax (which term includes any tax, charge, assessment or levy relating to the emission of carbon or carbon compounds into the atmosphere and any tax, charge, assessment or levy relating to any substance characterised as a greenhouse gas or greenhouse precursor gas)."[3]

When this amendment is applied to the definition contained in the 2005 ISDA Commodity Definitions, "Tax Disruption" means (with emphasis added to the amendment):

> "the imposition of, change in or removal of an excise, severance, sales *carbon tax (which term includes any tax, charge, assessment or levy relating to the emission of carbon or carbon compounds into the atmosphere and any tax, charge, assessment or levy relating to any substance characterised as a greenhouse gas or greenhouse precursor gas)***,** use, value-

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2 Section 7.4(d)(i) of the 2005 ISDA Commodity Definitions.

3 This amendment is suggested at 3.8.5 of the AFMA Guide to Australian OTC Transactions (formerly Part 20 of that Guide).

added, transfer, stamp, documentary, recording or similar tax on, or measured by reference to, the relevant Commodity (other than a tax on, or measured by reference to, overall gross or net income) by any government or taxation authority after the Trade Date, if the direct effect of such imposition, change or removal is to raise or lower the Relevant Price on the day that would otherwise be a Pricing Date from what it would have been without that imposition, change or removal."

The definition of Tax Disruption Event can be broken down into these components, each of which must be satisfied for an event to constitute a Tax Disruption Event:

(a) the event must be at least one of a list of possible taxes;

(b) one of which must be "*on*, or *measured by reference to*" the relevant Commodity;

(c) the tax must be imposed by any government or taxation authority;

(d) the tax must be imposed after the Trade Date; and

(e) the *direct* effect of the tax must be to raise or lower the Relevant Price from what it would have been without that imposition, charge or removal.

The imposition of the AETS as described in the policy paper may satisfy elements (a), (c) and (d) of the amended definition of Tax Disruption Event, but in the author's opinion is unlikely to satisfy elements (b) and (e). The reasoning is set out below.

Firstly, note that for the purposes of this definition, the "relevant Commodity" is electric energy (or sometimes mistakenly called "electricity"); the "Trade Date" is the date on which the Transaction is first agreed, and the "Relevant Price" is the price per unit of the commodity to be used for the purposes of the Transaction.[4]

Secondly, the word "tax" appearing immediately after the word "carbon" in the amended definition of Tax Disruption Event is in the author's view unintentionally redundant. The original definition had a list of nine possible taxes, each of which was referred to only by its adjectival prefix and did not include the word "tax". The word "tax" appearing after the words "or similar" was intended to be read against the description of each of the nine former types of tax. That is, the clause was intended to have the same meaning as if it had read "excise tax, severance tax, sales tax, use tax, value-added tax, transfer tax, stamp tax, documentary tax, recording tax or similar tax…". By inserting "carbon tax" into the middle of this list of nine taxes, it is suggested that the draftsman intended "carbon tax" to be qualified by the same conditions that applied to the other nine taxes, and which are referred to above as components (b) to (e) of the definition. However, the words in parentheses were probably intended to ensure that a broader rather than narrow view of tax was taken, and to encompass a tax that referred to greenhouse substances rather than just carbon.

2.3.1 Component (a) – tax

Component (a) of the Tax Disruption Event is that there must be a tax as defined, being one of the 10 defined taxes, or a similar tax. Under the AETS as described in the policy statement, there is no "tax" in the traditional sense to be implemented under the AETS. A "tax" is generally defined as a

[4] Section 6.2(c) of the 2005 ISDA Commodity Definitions.

compulsory mandatory contribution demanded by the government.[5] It is also a common element that no right or benefit is conferred in exchange for the payment of the tax.

The expression "carbon tax" is broadly defined and expanded by the words in parentheses in the amended definition of Tax Disruption Event. It is expanded in two respects. It is expanded as to the range of substances (carbon emissions, carbon compound emissions, greenhouse gas, or greenhouse precursor gas). It is also expanded by the nature of the exaction (tax, charge, assessment or levy).

We have not yet seen the form of the legislation underpinning the AETS. However, from the policy documents proposing the AETS, it appears that there is no tax as such, but there are two possible kinds of payments:

(a) the cost of purchasing a permit to emit greenhouse emissions; and

(b) the permit fee payable if insufficient permits are acquitted to cover the emissions which have been produced.

The permit cost and permit fee are both payments for which consideration is given – permission to produce greenhouse emissions. In that respect, they differ from the usual compulsory exactions, by having a benefit or consideration conferred. If characterised as permit fees, permit costs, or penalties for non-acquittal of permits, then they *may* fall outside the concepts of "tax, charge, assessment or levy".

Without the benefit of the legislation, it is difficult to be conclusive on this issue. But there must be some doubt as to whether a NETS would constitute a "carbon tax" as referred to in the amended definition of Tax Disruption Event, because of the specific benefits being conferred in consideration of the payment. Although the issue is still open, it does not matter much, because the conclusions on components (b) and (e) are likely to determine the overall issue.

2.3.2 Component (b) – "on, or measured by reference to, the Commodity"

The Commodity for these hedge transactions is electric energy. The AETS does not impose costs measured by reference to the Commodity. There is no tax, levy, assessment or charge measured by reference to the quantities of the Commodity, or the value of the Commodity. The Commodity is unlikely to be mentioned in the AETS legislation at all. The AETS, to the extent that it is a tax (as broadly defined to include charges, levies and assessments), is imposed on, or measured by reference to, greenhouse emissions, not electric energy.

The author's view would be different if, for instance, there was a sales tax imposed on the value of electric energy sold by coal-fired power stations, or a tax measured by reference to the quantities of electric energy sold by coal-fired power stations, or perhaps a tax imposed solely on the production or sale of electric energy, which is calculated by reference to the levels of greenhouse emissions or carbon used in that production.

However, a broad-based tax on emissions generally from a broad range of sources is not a tax "imposed on, or measured by reference to, the Commodity".

Therefore, in the author's opinion and based on our what is only a preliminary knowledge of the AETS, the imposition of the AETS will not satisfy what we have described as component (b) of the amended definition of Tax Disruption Event for the purposes of the ISDA Master Agreement.

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5 Macquarie Dictionary.

2.3.3 Component (e) – "direct effect"

What has been called above component (e) of the amended definition of Tax Disruption Event requires that the direct effect of the imposition of the tax must be to raise or lower the Relevant Price from what it would have been without that imposition, charge or removal.

A sales tax, or value-added tax, on a commodity, is likely to have a direct effect on its price. So is a stamp tax likely to have a direct effect on its price. This will be particularly so if:

(a) all vendors of the commodity are similarly affected by the imposition; and

(b) the commodity is not substitutable for another commodity.

The "Relevant Price" here is the spot price of electric energy in a region of the NEM. An increased cost of production incurred by some plants producing the commodity (electric energy in a region) will not have a direct effect on the Relevant Price. The effect, if it exists, is an indirect one. It is *indirect* because:

(a) the Relevant Price is determined by a range of producers, some of whom are affected and some of whom are not;

(b) electric energy produced by emitting plants is immediately and instantaneously substitutable for electric energy produced by non-emitting plants, or by other energy sources altogether;

(c) the Relevant Price is dependent upon the bidding and scheduling decisions of the producers and NEMMCO;

(d) the Relevant Price is dependent upon the consumption levels (or energy efficiency decisions) of consumers;

(e) the effect on the Relevant Price will be dependent upon the extent to which some producers have permits allocated free-of-charge, purchase permits, pay the penalty permit fee, take abatement action, or substitute plant with lower emitting plant; and

(f) the effect on the Relevant Price will be dependent upon the extent to which the merit order of dispatch is changed.

The Relevant Price *is* likely to be affected. A sales tax or value-added tax on all electric energy is likely to have a direct effect on the Relevant Price. But, for the reasons mentioned above, in this case an increased cost of acquiring permits to cover the emissions of some generators is an **indirect** effect on the Relevant Price. There are many factors and contingencies which will interrupt the directness of the effect.

Therefore, it is the author's conclusion that component (e) of the amended definition of Tax Disruption Event is unlikely to be satisfied by the introduction of the AETS. This is also consistent with the general nature of a commodity swap. A commodity swap is usually intended to protect the buyer of the swap from upward movements in the price of the commodity, and the seller of the swap from downward movements in the price of the commodity. If the seller wished to protect itself from increased input costs in the production of the commodity, then it should be hedging those input costs rather than hedging the commodity, or else stipulating a contractual provision (such as the AFMA Part 29 Regulatory Disruption clause) that increases the fixed price of the swap to cover increases in its costs of production.

Market Disruption Events under the 2005 ISDA Commodity Definitions are designed to cover the position where the Commodity Reference Price no longer reflects the real price of the underlying commodity, perhaps because of some artificiality or distortion introduced by a tax or reformulation of an index.

With the introduction of the AETS, if it is the case that the price of the underlying commodity (electric energy) will rise, then the floating price of the hedges ought to reflect that rise rather than be adjusted downwards by a Market Disruption Event. An application of the Tax Disruption Event would cause the floating price of the hedges to depart from the underlying price of the commodity, which is contrary to the intention of the Market Disruption Event clauses.

2.4 Other "Change in law" Clauses for Carbon Pass-through

Change of law clauses are more common in longer term contracts rather than shorter term contracts, because most changes of law are signalled by Governments well in advance of their implementation (to avoid undue disruption and enable parties to adjust their positions and pricing appropriately). Tax changes tend to be less well signalled, and hence are more commonly the subject of change of law clauses.

When parties negotiate a forward contract for a commodity, in a balanced market they typically price it according to their forward expectation of the spot price, plus a buyer's premium for obtaining certainty and minimising risk, less a seller's premium for obtaining certainty and minimising risk. Often the buyer's and seller's premiums net out, and the contract price simply reflects the forward expectation of the spot price. If the forward price diverges too far from the anticipated spot price, a party may elect to not trade forward and instead trade on the spot market.

If a change of law changes the cost of production of the commodity, this changed cost of production is likely to reflect itself in the spot market after the change of law has occurred, assuming:

(a) the market is balanced in supply and demand terms;

(b) the changed cost does change the demand, and

(c) the commodity is not substitutable by another commodity that is not similarly affected by the change in law.

A change of law clause that adjusts the price for increases in the seller's costs is often acceptable to a purchaser where the purchaser can pass on the cost increase via its sub-sales of the commodity (either via contracts with a pass-through clause, or contracts written after the law change is known), or where the purchaser can see that the change of law is likely to affect the spot price similarly, so that it is not disadvantaged by having bought forward versus what its position would be if it had elected instead to buy spot. If the spot price is going to be similarly affected to the forward contract price, then the purchaser that accepts a change of law clause is not going to be unduly disadvantaged in comparison to competitors that buy on the spot market, or competitors that enter forward contracts after the law change.

A change in law clause that only relates to tax changes tends to be more acceptable to a purchaser, because the universality of the tax laws means that there is a greater likelihood that the spot price will move synchronously with the adjustment to the contract price, where all producers or all sales of the commodity will be affected.

A change in law clause that relates to other changes in law that affect the costs of production, other than just tax changes, may start to expose the purchaser where the methods or places of production of the commodity vary from producer to producer, and the purchaser may become exposed if the producer with which it is contracting is more heavily affected by the change in law than other producers. In that case, the contract price (after application of the change of law clause) may move out of the range of the spot price and other forward contracts in the market, because unaffected producers will be able to offer lower prices. In that case, a purchaser may require some compensation for accepting the risk of such a clause.

In electric power markets at present, there is an issue arising in relation to the treatment of carbon price pass-through, because some producers will be much more affected than others. A purchaser that purchases (or hedges the power price) from a coal-fired generator, and accepts a clause which increases the contract fixed price for any of the costs incurred by the generator arising from the imposition of a cost for emission permits, may end up paying a substantially higher contract price than a purchaser that purchases from a generator that has no emissions (eg a hydro generator) or a generator that has lower emissions (eg a gas-fired generator). A purchaser that accepts a pass-through clause from a heavily-affected producer may end up with a contract price that is well out of range of the spot price or forward contract prices from other producers that will be less heavily affected by the change in emissions law. To take on this risk, the prudent purchaser would seek a lower initial fixed price from the producer which faces the greater carbon risk.

Prices being offered for electric energy hedges on the Sydney Futures Exchange will become an interesting benchmark, because the futures contract is based solely on average NEM spot prices and contains no "change of law" clause. Traders in these futures contracts will be effectively estimating the likely future direct and indirect impact of the AETS on energy prices, about three years before the AETS is introduced.

Traders and intermediaries that intend to pass through carbon costs to their sub-customers via similar change in law clauses, may face difficult questions from their customers if they contracted with carbon-intensive producers and included a carbon price change clause, when the same commodity was available from less-carbon-intensive producers for similar prices but without the corresponding price risk flowing from a change in law clause. Purchasers facing a potential pass-through from their trader may wish to conduct due diligence on the extent to which the trader's suppliers are carbon-intensive suppliers.

2.5 Net Pass-through

It is usual in change of law clauses that the contract pass through only the net increase in costs arising from the change in law, after accounting for any benefits arising from the change in law. For example, this is the approach taken in the AFMA Australian Gas Trading Addendum,[6] where the clause specifically has references to "net increases in costs" and "net decreases in benefits".

A "net" approach to a change of law, which takes account of both increases or decreases in both costs and benefits, both direct and indirect, is much more reasonable, for two key reasons:

(a) if it is not calculated on a net basis, taking account of the benefits, the seller receives a windfall gain from the change in law; and

(b) it is likely that the spot price for the commodity will only move to the extent of the net increase in direct and indirect costs flowing from the change in law, not just the direct or

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[6] Published by the Australian Financial Markets Association, 2006.

gross increase, and if the purchaser is required to pay the direct or gross increase without taking into account the benefits (direct or indirect), then the price being paid by the purchaser will move out of range of the spot price and the other forward contracts and the purchaser will become disadvantaged versus what its position would be had it not contracted and instead bought at spot prices or after the change of law.

2.6 Suggestions for Buyers

A prudent purchaser of a commodity or service should investigate the carbon emissions embedded in the chain of production occurring prior to its point of purchase, in addition to those occurring after its purchase.

For example, the greenhouse gas emissions occurring from the extraction and processing of natural gas vary widely between the different gas basins in Australia. The scope 3 emission factor for natural gas from South Australia (18.6kg of CO_2-e/GJ) is more than 300% of the emissions for natural gas from Queensland (5.4kg of CO_2-e/GJ).[7] A purchaser that promises to pay for the cost of the upstream emissions occurring from the natural gas that it purchases may find that it has a very different cost, depending on where that gas comes from.

If drafting a carbon pass-through clause now, with knowledge of the announcement of the AETS, a prudent purchaser that was prepared to accept a carbon price pass-through under a change in law clause might seek:

(a) that the clause assessed both costs and benefits;

(b) that the clause assessed these both directly and indirectly;

(c) that the clause took the net position after increases and decreases;

(d) that the change of law was capable of producing a rise or fall in the price;

(e) the benefits of emission permits allocated free of charge to existing facilities are brought to account as a benefit from the change in law;

(f) similarly, any permits allocated free of charge to trade-exposed emission intensive industries be brought to account;

(g) representation or warranties from the seller as to the carbon intensity of the product (the quantity of emissions associated with its production to the point of sale), or a provision in the pass-through clause limiting recovery of emissions costs to a nominated intensity.

Whether or not the change of law clause is drafted on a "net" basis, the seller ought not be able to recover the costs of a taking action in relation to the introduction of the AETS, if alternative methods of addressing the law change would result in less cost. For instance, if it is possible to purchase greenhouse emission permits in the market for less than the cost of the installation of new plant, then if the law change simply requires the acquittal of a permit rather than mandates changes to the plant, a purchaser could properly insist that the seller only recover the market cost of the permit.

It is not uncommon for purchasers, when faced with environmental costs pass-through clauses, to insist on an express right in the contract to transfer to the seller the required environmental permits attributable to its quantity of the commodity in advance of the acquittal date, as an alternative to the seller charging to the purchaser the costs of the seller acquiring the permits. Many large

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[7] Australian Department of Climate Change, National Greenhouse Accounts Factors, February 2008, Table 2.

purchasers feel that they are better placed, or better incentivised, to acquire those permits themselves than simply have the seller charge them for the permits.

Even if the contract does not contain an express right for the purchaser to transfer environmental permits to the seller in satisfaction of the pass-through, it would be possible for a purchaser to offer them to the seller at a nil or market price, and thereby pressure the seller to mitigate its cost by accepting the permits at that cost. A seller that refused to mitigate its cost of the law change by accepting the offered permits may have difficulty subsequently seeking to charge a higher cash pass-through cost.

Note also that where the change of law is likely to increase the price of the commodity and is signalled well in advance of the term of the forward contract, but not implemented prior to the contract date, you may find that the market prices at the time of the contract already partially or wholly reflect the expectation of higher future spot prices arising from the anticipated change of law. A contract that then contained a full change of law pass-through may give the seller an over-recovery, because the forward prices already had some or all of the likelihood of the cost increase factored in.

We could already be seeing this in forward power prices in Australia, where assumptions as to new entrant generation are assuming new entrants will be gas generation, notwithstanding that they may not be the lowest marginal cost generator if a carbon cost is ignored.

Where the forward price is already recognising some likelihood of the change in law, then it is not unusual for the parties to exclude or discount that specific anticipated change from the operation of the clause. Methods of achieving this include:

(a) excluding the particular known or anticipated law;

(b) providing that only a percentage of the cost of the change of law is passed through (eg if the forward price already carries a 50% likelihood of the new scheme or law being introduced, passing through only the remaining 50% of the cost);

providing compensation only if the rate imposed or cost of the change exceeds a forecast amount (eg only to the extent that the cost of an emission permit exceeds $15/tonne, or only to the extent that the required abatement rate in a given year exceeds a certain percentage from 1990 levels).