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## TAXATION AND THE TRADING OF CARBON CREDITS

By Michael Cashman and Michael Hutchinson

*With the recent introduction of the CRC Energy Efficiency Scheme in the UK, and a carbon market in the EU which is in excess of $20 billion annually, understanding both how the carbon trading market operates and the tax implications for the companies that participate in the market is becoming increasingly important.*

**How does the ETS operate?**

The EU Emissions Trading Scheme (“ETS”) is an obligatory ‘cap and trade’ system relating to carbon dioxide emissions. It was established by the Emissions Trading Directive 2003 and aims to help the EU achieve its Kyoto greenhouse gas emissions commitment by providing economic incentives for energy efficiency and low-carbon activities in industry. The ETS has been split into three phases: Phase I ran from 2005-2007; Phase II runs from 2008-2012; and Phase III runs from 2013-2020. Stricter requirements for Phase III of the scheme have arisen as a result of the EU ETS Amending Directive 2009.

The ETS entails the provision of a set number of allowances to each Member State (“MS”) by the European Commission in accordance with approved National Action Plans (“NAPs”). MSs then allocate an annual allowance ‘cap’ to all participating entities based on their historic emissions figures. Each entity must surrender to the national authority (in the case of England and Wales, the Environment Agency) allowances equal to its carbon dioxide emissions, with one allowance representing one tonne of carbon dioxide. Actual emissions for the previous calendar year must be reported to the national authority by the end of March each year. Participants are then obliged to surrender allowances to cover these emissions one month later, and when this occurs the allowances are cancelled. Failure to comply with these requirements will leave participants liable to fines and an obligation to make up allowance shortfalls in future years. In Phase III, NAPs will be replaced by National Implementation Measures (“NIMs”) which will contain a list of installations covered by the scheme as its scope is extended for this phase.

**Entities covered by the ETS**

The ETS focuses on heavy industry and the following installations are obliged to participate, as listed in Annex I of the Emissions Trading Directive:

- In the energy sector - combustion installations with a thermal input of at least 20MW; mineral oil refineries; coke ovens
- In the ferrous metal sector - metal ore installations; steel installations with a capacity of 2.5 tonnes/hour
- In the mineral sector - cement kilns producing 500 tonnes/day; lime kilns or other furnaces producing 50 tonnes/day; glass installations melting 20 tonnes per day; ceramic kilns producing 75 tonnes/day or with a kiln capacity of 4m³ or setting density per kiln of 300kg/m³

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Climate exchanges have developed upon which these various contracts are exchanged, there are now over 10 such exchanges in Europe and around 40 worldwide.

The taxation of carbon credits in the EU

The rules relating to the taxation implications of acquiring, using and trading in carbon credits differ in their detail between the various EU countries. This article will discuss firstly the UK corporation tax and VAT consequences of acquiring, using and trading allowances, and then compare and contrast the UK analysis with the analysis in France, Germany and Spain. We will then briefly discuss some issues relating to VAT fraud and carbon trading.

UK corporation tax and VAT analysis

Whilst significant guidance and commentary is available on the indirect tax consequences of acquiring and trading carbon allowances, there is little official guidance in the UK on the direct tax consequences.

The starting point for the UK corporation tax analysis is the accounting treatment. A financial reporting standard covering carbon credits (IFRIC 3 Emission Rights) was issued in 2004, however, it was withdrawn shortly after in 2005. Since that date there has been much discussion about the correct method of accounting for emission rights, but no replacement standard has been issued.

Notwithstanding this, the guidance provided by existing standards leads to the conclusion that when allowances are received from a governmental body, the allowances are recognised as an asset with nominal (i.e. nil) value and thus the acquisition of allowances by way of a grant from a governmental entity gives rise to no UK tax consequences. The asset is surrendered at the end of the compliance period, and written off at that time. Corporation tax will be payable when the allowances are released to the profit and loss account.

Also, installations producing pulp; installations producing paper or board at 20 tonnes/day

The scope of the ETS has recently been extended and from the beginning of Phase III in 2013 will encompass the petrochemical, ammonia and aluminium sectors. Controversially, it will also apply to the aviation industry from 2012.

Trading of allowances

The market for allowances trading is based on the fact that some participants will need to buy additional allowances to cover their emissions, while other participants will be able to sell surplus allowances. All dealings with allowances (whether they be allocations, surrenders, cancellations or transfers) are recorded in the online national registers of MSs which are supervised by a central EU administrator. Allowances can even be traded between national registries.

As carbon trading commenced the markets saw significant variations in prices, which has led to the increased use of derivative contracts in relation to carbon allowances. Derivatives are bilateral contracts that are valued according to the value of a certain asset set at a future date. These mechanisms provide buyers with protection against future prices rises in allowances and have created investment opportunities for financial institutions. Commonly-used types of derivatives in the carbon markets are:

- Options – a contract for the right to buy or sell an agreed amount of allowances on a certain date in the future, at a fixed price;
- Forwards and Futures – a contract for the obligation to buy or sell an agreed amount of allowances on a certain date in the future, at a fixed price;
- Swaps – the exchange of allowances for other types of emissions credits such as Certified Emissions Reductions (‘CERs’) and Emission Reduction Units (‘ERUs’).
Once such allowances have been issued, these allowances will have a market value. Any further transfers of allowances between two commercial parties will be treated as a supply of services for VAT purposes. HMRC’s view, as expressed in VAT Notice 741, is that cross-border trading in emissions allowances or instruments fall within Schedule 5, Value Added Tax Act 1994, and therefore VAT is chargeable in the jurisdiction in which the recipient belongs.

As an interim measure whilst an EU wide solution to deal with VAT fraud on allowance trading is implemented (see discussion below), the supply of allowances in the UK is zero rated.

Taxation in other European countries

Unlike the UK, certain other European countries have provided more detailed guidance on the tax and accounting treatment of allowances.

Spain

The tax treatment of emissions in Spain follows the accounting treatment, as determined in accordance with Spanish GAAP.

Emission allowances are treated as “intangible assets”, and the allocation of allowances by the governmental authority is treated for corporate income tax purposes as a government grant (shown on the balance sheet as deferred income) and is accounted for at its fair market value. If the company purchases allowances, the company is required to account for these allowances at their acquisition cost. If allowances are acquired by the joint implementation system or through the clean development mechanism such allowances must be accounted for at their production cost.

An obligation to surrender allowances to the state in respect of emissions arises at the end of the emission period. A provision for “risk and expenses” is recognised, and gives rise to a
allowances must be recognized at their acquisition costs. A write-off of these allowances must be made if the fair market value falls below the acquisition cost.

The company has an obligation to surrender allowances by 30 April of the following calendar year, which gives rise to a liability which must be shown in the balance sheet. This liability reduces the taxable income of the company to the extent that purchased allowances are surrendered.

Allowances are transferable and a German company could purchase additional allowances in order to cover a gap between the allowances which it holds and the actual emission of carbon dioxide units. Unused allowances can of course be sold. Any profit made in the course of such a sale constitutes taxable income, determined by reference to the difference between the sales price and the book value of the sold allowances.

From a VAT perspective, the granting of (free of charge) allowances by the authorities is not subject to VAT. The transfer of allowances is considered as a supply of “other services” and is subject to VAT at a rate of 16% (18% from 1 July 2010).

In addition, if the transfer of emission allowances is carried out by individuals the transfer would be subject to a transfer tax at a rate of 4%.

Germany
On 6 December 2005, the German Ministry of Finance issued a circular dealing with the tax treatment of emissions allowances. Allowances are treated as intangible assets and must be reported in the (tax) balance sheets as current assets. Allowances granted free of charge by the authorities have a balance sheet value of nil. Costs associated with the acquisition of the (free of charge) allowances, such as application costs, are business expenses and are deductible in the year in which the notice of the allotment of allowances has been issued by the authorities.

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France
The French tax authorities have indicated that the tax treatment for greenhouse gas emission allowances should follow the accounting treatment (administrative guidelines, BOI 4 A-13-05 n°25 and 26 dated 30 December 2005).

The CRC 2004-08 regulation dated 23 November 2004 has specified the accounting treatment of allowances and established that they must be accounted for as intangible assets. The allowances granted by the government are accounted for at their fair market value, but generally, this does not affect the taxable result (indeed, as the emissions are produced, the company must account for liabilities for an amount corresponding to the obligation to return the rights to the government).
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In practice, accounting for emission allowances in the assets of the balance sheet is only likely to affect the accounting and tax result if and when the company undertakes transactions involving the purchase of additional rights and/or the sale of surplus allowances. Any profits arising from these transactions would be subject to tax as ordinary income.

Under the French VAT rules, the transfer of allowances is regarded as a supply of services falling within the scope of VAT. However, these transactions benefit from the tax exemption mentioned in article 261 C 1° e) of the French Tax Code relating to “transactions on securities”. Therefore, sales of emission allowances and reduction units are exempt from VAT, without any possibility of making a VAT option.

**Tackling VAT fraud: the European approach**

The high volume and value of trading in allowances, and the relative lack of regulatory supervision, meant that allowances became the latest object of Missing Trader Intra Community ("MTIC") fraud. Such fraud can be carried out in relation to any cross border supplies which are subject to VAT – whilst this has previously been focused on goods such as computer chips and mobile phones, its prevalence has now been extended to supplies of services such as the trade of allowances.

Following the escalation of this problem in 2009, three individual Member States – including the UK – took steps to combat such fraud. The UK announced on 30 July 2009 that zero-rating would apply to “any transaction in EU emissions allowances and transferable units issued pursuant to the Kyoto Protocol”. In contrast, the Netherlands extended the application of the reverse charge mechanism whilst France removed the application of VAT from the carbon markets.

In September 2009, the European Commission put forward a proposal to combat such fraud on a Europe-wide basis. Directive 2010/32/EU, amending Directive 2006/112/EC, came into force on 9 April 2010. The new Directive allows Member States to temporarily extend the application of the reverse charge mechanism to certain supplies of goods and services which are viewed as susceptible to fraud (including emissions allowances). Where a Member State chooses to apply the reverse charge mechanism to a supply of goods or services, it must do so for a minimum of two years. The new Directive is only intended as a temporary measure, and accordingly shall only apply until 30 June 2015.

The effect of the reverse charge mechanism is that the purchaser of the allowances will be responsible for accounting to the tax authorities for the appropriate amount of VAT. At the same time, it will also be entitled to recover its VAT cost; therefore, ultimately no payment will be required to be made by either the purchaser or the tax authority.

**CRC Energy Efficiency Scheme**

The Carbon Reduction Commitment Energy Efficiency Scheme (the “CRC”) is a mandatory UK carbon trading scheme which came into effect in April 2010. The CRC requires organisations which fall within its scope to buy, on an annual basis, allowances equivalent to their electricity use. Availability of allowances will reduce over time in order to incentivise energy efficiency as the price of allowances is expected to rise. The scheme will “recycle” the money it raises in one annual sale of allowances back to participants of the CRC. The amount of money individual participants receive will depend on their behaviour, as reflected in a public league table.

From a compliance perspective, the scheme is complex, and failure to comply may lead to the imposition of criminal penalties hefty fines, “naming and shaming” and even potential director liability. As well as ensuring there is enough allowances to cover electricity use, participants will also have to comply with substantial data collection and reporting requirements related to their consumption. The CRC’s introductory phase will run from 1
April 2010–31 March 2013 and from then subsequent phases will run for 7 year periods until 2043. These subsequent phases will overlap the final two years of the previous phase in order to fit in a ‘Qualification Year’ and a ‘Footprint Year’. These years are preparatory periods for the rest of the phase when allowances must be purchased and annual reports submitted.

Entities covered

The CRC is not sector specific, so it will potentially cover a range of businesses including large corporates, financial institutions, retailers, office-based businesses, engineering and chemicals businesses and the hotel and leisure sector, amongst others. It applies to all organisations where the aggregate electricity consumption in 2008 exceeded 6,000 MWh (equivalent to an electricity bill of about £500,000) measured on half-hourly meters.

The CRC and tax

The tax implications discussed above will also apply to the transfer of allowances under the CRC. The feature that differentiates the CRC from other emissions trading schemes is the ‘recycling payments’ given to participants in accordance with their performance in the published league table. The first payment will not be made until October 2011 and it is expected that any sum an organisation receives in this respect should be treated as taxable income. Similarly, it is also expected that penalties incurred as the result of poor performance should be a deductible expense of the business.