

## REPUTEX RESEARCH NOTE CARBON ACCOUNTING & COMPANY BALANCE SHEETS

### **CARBON ACCOUNTING & COMPANY BALANCE SHEETS**

#### **i. Who needs to consider the impact of carbon accounting?**

##### **• Emitters (e.g. under the EU ETS)**

Certain companies are allocated emission allowances – they must either reduce emissions to remain within their allowance or buy additional allowances to cover total measured emissions.

##### **• Creators (under the Clean Development Mechanism) -**

Companies can invest in or develop emissions-reducing projects overseas within production processes or produce 'green energy' products. Reductions must be certified to receive Certified Emission Reductions (CERs) which can then be sold or used to fulfil the organization's own emission obligations.

##### **• Traders/brokers/aggregators**

Dealers may buy and sell CERs and allowances or derivatives based on the underlying asset

##### **• Investors/Consultants**

Consultants who assist others to reduce emissions and/or claim CERs may receive their fee in CERs or options to buy CERs. Investors may invest specifically in carbon related activities in return for CER.

#### **ii. Which accounting standards currently apply?**

At the moment, there is no authoritative accounting guidance within International Financial Reporting Standards (IFRS) for transactions involving carbon allowances.

The EU initially operated its carbon liability reporting requirements under IFRIC 3 (International Financial Reporting Interpretations Committee), but this standard was withdrawn in June 2005. Among the issues with IFRIC 3 was the mismatch between the valuation of assets and liabilities, which led to artificial income volatility. There are currently many different accounting treatments emerging (there are up to 15 different approaches for balance sheet methodologies alone), which serves to undermine the accuracy and comparability of public financial statements.

#### **iii. Current Developments**

The IASB and the FASB are conducting a joint study to develop guidance for emission allowance accounting, with a draft expected in the second half of 2009 and an International Financial Reporting Standard expected in 2010.

The IASB has identified the following questions regarding the treatment of emission allowances for accounting purposes:

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- Are emissions allowances assets? Is this conclusion affected by how the allowance is acquired? What is the nature of the allowance (e.g., a license to emit or a form of emission currency)? If allowances are assets, should they be recognized, and, if so, how should they be measured initially?
- What is the corresponding entry for an entity that receives allowances from government free of charge? Does a liability exist? If so, what is the nature of the liability and how should it be measured both initially and subsequently?
- How should allowances be accounted for subsequently?
- When should an entity recognize its obligations in emissions trading schemes and how should they be measured?

The answers to these questions could impact how emission allowances trade, as accounting driven products can push trading volume to OTC transactions and less regulated markets. For example, if allowances are treated as assets requiring mark-to-market accounting, holders may have a disincentive to purchase emission allowances and instead may seek derivative products to minimize the earnings volatility reflected on their balance sheets.

Principles-based accounting standards developed by government regulators (e.g. IASB, FASB etc.)

could allow different treatment for allowances held for compliance purposes and those held as investments to sell at a later date, thereby removing the risk of balance sheet volatility that may otherwise be associated with the possession of allowances for compliance. Elements of principles-based accounting could include the following:

- Free allowances have no cost to the emitter and could be off-balance sheet (as they are today in the domestic SO<sub>2</sub> market);
- Purchased allowances could be held as intangible assets, and be subject to impairment rather than mark-to-market, *if the intention of the holder is to submit the purchased allowances for compliance*;
- Purchased allowance derivatives could be held as deferred expenses on the balance sheet, *if the intention of the holder is to exercise the derivatives and submit the underlying allowances for compliance* (at which time the deferred expense will flow through the income statement); and
- Financial intermediaries and other carbon investors could use fair value accounting and mark all carbon instruments to market if they have no compliance obligation

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### **iv. Key Accounting Issues for Emitters**

In RepuTex's view, the need for a standardised set of carbon accounting principles is increasingly necessary to mitigate the risks associated with divergent carbon asset and liability recognition practices seen in the EU.

The multitude of accounting standards currently adopted and interpreted by market participants to contain relevant definitions include:

- Intangible assets (IAS 38)
- Government grants and assistance (IAS 20)
- Inventory (IAS 2)
- Financial assets and derivatives (IAS 39)
- Provisions, contingent liabilities and contingent assets (IAS 37)

The most common approach is that emissions allowances (e.g. EU ETS allowances) be treated as intangible assets. In some cases the intangible asset may itself be inventory and certain companies may hold that inventory as a broker/trader. In practice both intangible and inventory classifications are used. Similarly, the classification of permits as financial assets is open to interpretation, implying that contracts to acquire allowances are not strictly recognized as derivatives products. It should be noted that

proposed schemes such as the Australian CPRS will recognize permits as financial assets.

In the meantime companies must interpret the existing standards based on the fact pattern of their particular business model, strategy and transactions. This will include providing relevant disclosures of policies, transactions and balances included in their financial statements.

### **CASE STUDY:**

The following outlines the contrasting positions and interpretations of carbon accounting in use by two major Energy companies in the EU (with obligations to the EU ETS).

### **RWE**

*Expects to obtain 40% of yearly permit shortfall though markets (the rest via CDM/JI projects); having spent €194mil to meet obligations in 2008*

- CO2 emission allowances are accounted for as intangible assets and reported under other assets. Allowances which are purchased and allowances allocated free of charge are both stated at cost and are not amortize
- A provision is recognized to cover the obligation to deliver CO2 emission allowances to the competent authorities; this provision is measured at the book value of the CO2 allowances capitalized for this purpose. If a

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portion of the obligation is not covered with the available allowances, the provision for this portion is measured using the market price of the allowances on the reporting date

### **Vattenfall**

*At the end of 2008, the firm held an emission credit balance of 652 tonnes (up from 432 in 2007); and actively traded over 2500 credits throughout the year.*

- Purchased emission allowances are reported as intangible assets under current assets at cost less accumulated impairment losses, while emission allowances that have been received free of charge from the respective countries' authorities are stated at a value of nil.
- As carbon dioxide is emitted, an obligation arises to deliver emission allowances (EUAs, CERs, ERUs) to the authorities in the respective countries. An expense and a liability are booked only in cases where the emission allowances that were received free of charge do not cover this obligation. This liability is valued in the amount at which it is expected to be settled.

### **About RepuTex**

*RepuTex is a research and advisory firm specialising in the measurement and valuation of carbon emissions and sustainability risk.*

*RepuTex has offices in Melbourne, Shanghai and Hong Kong, its research is applied globally by top tier consulting and accounting firms, top 500 corporates, fund managers and pension funds.*

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