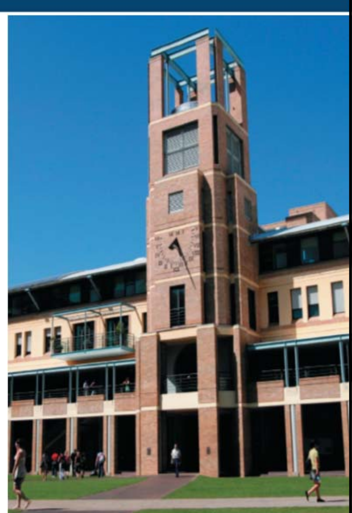
Australian School of Business

Never Stand Still | Australian School of Business

Accounting for Carbon Emission Allowances

China-Australia Carbon Market Design Expert Workshop
Jiasuo Hotel, Tsinghua University

Presented by:
Dr Maria Balatbat
13 October 2013



Tyree Energy Technologies Building (Home to CEEM)

Never Stand Still | Australian School of Business

Australian School of Business

AGENDA

1. Who needs to consider the financial accounting and reporting of emission allowances and why this is important?
2. Are emission allowances… an asset? …a liability?
3. Two Scenarios using lessons learnt under the Australian Carbon Pricing Mechanism (Fixed price and flexible price)
4. Accounting policies for carbon allowances under an Emissions Trading Scheme
5. Lessons learnt from the EU ETS Case

Australian School of Business

Importance of reporting for carbon emissions

Reduction of GHG is in the agenda of most governments, entities and individuals

Emission trading schemes or other form of tradable carbon rights have emerged and expanded in the last decade

Accounting implications

- Financial consequences imposed by carbon markets and other schemes (AAUs, EUAs, CERs, etc.)
- Recognition, measurement and disclosure issues on the treatment of emission permits and other tradable rights

Who needs to consider the impact of carbon accounting and reporting?

Australian School of Business

- Emitters who are subject to a carbon price*
- Creators of tradable carbon units
- Traders/brokers and aggregators (buying and selling carbon units and allowances or derivative instruments based on these underlying assets)
- Investors/Consultants who assist other parties to reduce emission and/or claim CERs and receives a fee

* - Focus of this presentation

Source: KPMG LLP (UK) Accounting for Carbon

Current State of Financial Reporting for Carbon Emission Allowances

Australian School of Business

No definitive guidance on accounting for carbon emission permits/rights

At best available guidance includes:

- IASB issued IFRIC 3 “Emissions Rights” issued in Dec 2004
  - AASB issued an equivalent UIG 3 in March 2005
  - **Withdrawn** in late 2005 due to mismatches in treatment of assets and liabilities
- Accounting for sulfur dioxide (SO_2) in the US where the Federal Energy Reporting Commission’s uniform systems of accounts require that **emission allowances be recorded at cost** and **not marked-to-market**.

Main concern for reporting entities

- What principles to apply to account for transactions that arise the carbon pricing mechanism
  - PwC/IETA (2007) identified 15 approaches to account for emission allowances/permits (6 main approaches if differences in classification are ignored)
  - These findings were reinforced in Lovell et al. 2010
- Lack of comparability if companies apply different accounting treatments for a similar transaction

Do permits in an ETS scheme give rise to an asset or a liability and/or liability?

Australian School of Business

- If a separate asset is recognised, what is the nature of this asset?
  - A resource controlled by an entity, as a result of past transactions/events from which future economic benefits are expected to flow
  - Evidenced by certificates that participants' have the right to sell or use
  - Gives rise to a deferred income upon receipt of free permits
- If a separate liability, deferred income and/or income is recognised, what is the nature of this item and how is it measured?
  - Present obligation arising from past events, the settlement of which is expected to result in an outflow of the entity's resources
  - Obligation to deliver allowances and permits
- No contractual link to settle this on a net basis

Do permits in an ETS scheme give rise to an asset or a liability and/or liability?(Continued)

Australian School of Business

Or does it give rise to a net asset or liability?

- Participants produce emissions to the extent of its allowances and recognise a liability only when it has produced more emissions than allowances held.

Australia during the fixed price phase - Permits as an Asset

Australian School of Business

- Non-monetary identifiable asset without a physical substance hence is regarded as intangible asset (AASB 138)
- Purchased and free permits are measured at the official price relevant for the vintage year (i.e. 2012-2013 = $23; 2013-2014 = $24.15 and 2014-2015 =$25.40)
  - free permits not-for-profit entities would apply AASB 1004 *Contributions, which would require permits to be recognised at fair value with a credit to income.*
  - free permits for-profit-entities would be subject to AASB 120 *Accounting for Government Grants ....* where there is a choice to recognise a nominal amount (which could be zero) or at fair value (i.e. official price). For the latter it is required to set up deferred income and recognised in the income statement on a systematic basis as emission occurs
- There is no trading expected that will lead to a timing/price mismatch in the balance sheet and the income statement

UNSW

Australia during the fixed price phase
Liability for Emissions

Australian School of Business

- Liable entities will be required to accrue a carbon tax payable as emissions take place measured at a price (in this case fixed price) of permits used to extinguish the obligation
- based on Scope 1 emissions
- liable entities will be required to report its interim emissions number, being 75% of total provisional emissions numbers
  - calculated on the basis of the previous eligible financial year's provisional emissions number (e.g. as reported under the NGERs)
  - or a reasonable estimate
- further administrative and late payment penalties apply if the entity fails to pay the shortfall charge

Australia during the fixed price phase - Other reporting issues

Australian School of Business

- Impairment of assets (AASB 136) – cash flows generated is reduced by the carbon tax hence the recoverable amount of an asset may be impaired which could result to a write down of an asset
- Carbon tax could also lead to onerous contracts if the contracts do not include a pass-through clause requiring the liable entity to recognise additional costs (AASB 137)
- Existing liabilities that exclude carbon tax may require additional provision (e.g. Site remediation provisions)

Possible Accounting Treatment-Flexible Price Period (UIG 3)

Australian School of Business

Equivalent to IFRIC 3 of IASB

Applies to cap and trade emission schemes

- other abatement measures not covered, e.g. CDMs, carbon offsets

Allowances/Permits held – treated as an intangible asset (AASB 138)

- Allowances are issued by governments at less than fair value
- Government grant is equal to fair value less amount paid
- Subsequently measured at cost or revalued (through equity)
- No impact on profit and loss
- Subjected to impairment tests at the end of the period and impairment expense to P&L, if impaired

Liability/Provision is recognised for obligation to deliver permits/allowances equal to emissions (AASB 137)

- Accrues as CO_2e is emitted
- Recognised at fair value through profit and loss
- Profit and loss impact

Flexible Price Period Possible Accounting Treatment – based on UIG 3(continued)

Australian School of Business

Free permits give rise to deferred income

- Permits are issued at less than fair value this will give rise to a government grant and deferred income until emission occurs
- Deferred income is amortised through profit and loss on a systematic basis
- Issue: What amount should government grants be recognised?

These accounting policies are plausible but assume that

- Sufficient permits are received
- Market value does not change
- Deferred income is released in line with the emissions produced
- Permits are not impaired

Unintended Consequence: Accounting mismatch

- Allowances (intangible assets) are measured at cost or revalued amount with movements credited to equity
- Liability is measured at fair value with movements to profit and loss

Flexible Price Period Possible Accounting Treatment - Net Liability Approach

Australian School of Business

Generally accepted in EUETS

Emission rights/permits granted are treated as intangible assets

- recorded at nominal amounts at grant date or at fair value
- Nil for rights issued for free (permitted under AASB 120)

Recognition of liability at reporting date, i.e. when actual emissions exceeds rights granted

- AASB 137 (Provisions, Contingent Liabilities and Contingent Assets) requires provision to be recognised when the recognition criteria in the standard are met
  - Obligating event is when the emission is made
  - Recognise liability only when emissions > permits held
  - Measured at existing market price when determined presumably at year-end
  - Shortfall is passed through P&L

Consider: Most transactions under this method are off-balance sheet

Lessons learnt from UK EU ETS (Wang and Balatbat, 2010)

Australian School of Business

Lack of guidance resulted to:
- Inconsistency in financial reporting
- Lack of comparability between entities
- Undermine investors' confidence in a company's strategy and approach to carbon transactions including trading

Inadequate disclosure on recognition and measurement of carbon emission permits

Measurement basis varies for a similar element

Current policies induces volatility in P/L results

Lack of transparency on who is accountable for covered installations

Implications/consequences on valuation and pricing of equity securities

Thank you!

Australian School of Business