

The business of climate change



Navigating the complexities of carbon pricing policy Accounting for a clean energy future

Key insights

- ▶ Confirmed carbon pricing mechanism start date of 1 July 2012 – the time to implement strategies to manage change is short and challenging
- ▶ No specific guidance in IFRS or US GAAP on accounting treatments for carbon assets and liabilities
- ▶ Divergent accounting practices have emerged in Europe and New Zealand, each having differing consequences on net profit and total assets. Three basic approaches applied are:
 - ▶ IFRIC 3 approach
 - ▶ Government grant approach
 - ▶ Net liability approach

With the passage of the Clean Energy Legislation Package (the "Legislation Package" or the "carbon pricing mechanism") through the House of Representatives in Parliament on 12 October 2011 and through the Senate on 8 November 2011, we will have a price on carbon emissions in Australia. In this publication, we discuss some of the accounting issues arising from the carbon pricing mechanism, in particular the accounting for free and purchased carbon units. For liable entities (ie entities which need to submit carbon units to cover emissions made) and for entities that receive free carbon units as compensation for increased energy costs, determining the most suitable accounting policy to communicate the impact of the carbon pricing mechanism to external stakeholders will be a key consideration in the overall process to get ready for the change. However, there is currently no specific guidance in existing accounting standards on how to account for the carbon pricing mechanism. In overseas jurisdictions where similar schemes have been in place for some time, a number of accounting practices have emerged.

This publication does not cover all of the possible accounting issues that might arise under the carbon pricing mechanism. We will need to wait for the regulations (expected to be finalised in early 2012), which will prescribe further details under the Jobs and Competitiveness Program, to confirm timing and administration of free carbon units that will impact on the accounting.

Rather, this publication can be used to help you identify the accounting issues relevant to your business, consider your accounting policy options where choices are available and to assist in discussions with internal and external stakeholders.

Overview of the carbon pricing mechanism¹



The Australian Government released its Legislation Package in a bid to meet its commitment to an initial national emissions reduction target range of between 5% and 25% by 2020 (based on 2000 levels). The Legislation Package outlines the details of a two-stage carbon policy comprising a fixed price per tonne of carbon dioxide emissions (or its equivalent) commencing 1 July 2012, transitioning to a flexible, market-priced, emissions trading scheme on 1 July 2015. This approach to pricing carbon emissions will be based on an annual compliance period from 1 July to 30 June (the "compliance period"), regardless of whether the entity uses a different accounting period for financial reporting purposes.

The carbon pricing mechanism differs from emissions trading ("cap and trade") schemes already established in other countries (such as the 27 member states of the EU), on the basis that the first phase of the Legislation Package involves a period in which the price for carbon units is fixed and entities can sell freely allocated carbon units back to the Government for a set amount of cash as determined under the Legislation Package.

¹ For more information refer to our publication, *Key issues from the Australian Government's Clean Energy Legislation Package*, Ernst & Young, November 2011

Fixed price period – 1 July 2012

The fixed price for units in year one will be \$23 per tonne of carbon dioxide equivalent (CO₂-e). This will increase by 2.5% (in real terms) for the remaining two years, to \$24.15 and \$25.40 for years two and three respectively. The quantity of carbon units available to be purchased from the Government during the fixed price period is uncapped. No internationally recognised carbon units will be eligible for compliance purposes, but up to 5% of an entity's liability will be able to be met from units generated under the Carbon Farming Initiative (CFI).

In this period, there will be no ability to bank or borrow carbon units purchased from the Government, but there will be unlimited banking of units from the CFI. Any carbon units purchased from the Government will be automatically surrendered upon purchase.

Flexible price period – 1 July 2015

After the fixed price period, a flexible market-set price will be established. The price of carbon will be determined through supply and demand characteristics via emissions trading. To provide some level of certainty on pricing, for the first three years of this flexible price period there will be a carbon unit price ceiling of \$20 above the expected international price, increasing at 5% per year in real terms, and a floor of \$15 per unit increasing at 4% per year in real terms. During the flexible price period, the number of carbon units that the Government will issue for free or sell at auction will be subject to an annual cap (unless the price ceiling is met or exceeded). The annual caps on carbon emissions for the first five years from 1 July 2015 will be announced before the start of the flexible price period. The caps will be extended each year so that annual caps for the following five years are known in advance. There will be provisions for banking and limited borrowing from future "vintages". Entities will not be able to sell freely allocated carbon units to the Government during the flexible price period.

In this period up to 50% of an entity's liability can be met with eligible international permits, and up to 100% from units generated via the CFI.

Financial implications

Most, if not all, entities in Australia will to various degrees be impacted by the carbon pricing mechanism. Entities may be impacted in the following ways:

- ▶ The entity is required, per the requirements in the carbon pricing mechanism, to surrender carbon units (either purchased or allocated for free) for their carbon emissions (referred to as "liable entities").
- ▶ The entity is impacted by an increase in cost associated with the flow-through of a price on carbon through the supply chain. This will include both energy price increases and additional costs for carbon-intensive goods and services.

Determining whether you are a liable entity is complex and will need to be assessed by entities based on their specific circumstances.

Government assistance²

In both the fixed and the flexible price period, the Australian Government has committed to provide assistance to a number of different industry sectors through direct and indirect mechanisms, such as:

- ▶ The provision of free carbon units to certain entities with emission intensive trade exposed (EITE) activities (either for their direct carbon emissions obligations and/or as compensation for increased energy costs) and eligible coal fired generators
- ▶ Various tax concessions
- ▶ Other forms of assistance, including cash funding

The accounting treatment for each type of assistance will depend on each entity's individual facts and circumstances. This publication only discusses government assistance provided in the form of free carbon units.

Available Government assistance:

The Government has made assistance available to entities, such as:

- ▶ The provision of free carbon units to certain EITE activities under the Jobs and Competitiveness Program
- ▶ Compensation in the form of cash and freely allocated units to the most emissions-intensive electricity generators to compensate for asset value erosion
- ▶ A commitment to finance the closure of around 2,000 MW of very highly emissions intensive coal fired generating capacity by 2020, based on certain quantitative and qualitative criteria
- ▶ Loans to electricity generators where they need to refinance their debt but are unable to secure loans from the private sector

Funding to encourage investment in new technologies:

- ▶ Clean Technology Investment Program – energy efficient capital equipment and low-pollution technologies, processes and products
- ▶ Clean Technology Innovation Program – research and development in CleanTech industries, such as renewable energy and energy efficiency
- ▶ Clean Technologies Food and Foundries Investment Program – energy efficient equipment and low-pollution technologies, processes and products in the food processors sector and the metal forging and foundry sectors
- ▶ Various tax concessions
- ▶ Other forms of specific assistance to particular industries

² For more information refer to our publication, *Key issues from the Australian Government's Clean Energy Legislation Package*, Ernst & Young, November 2011

Development of accounting guidance

There is presently no specific accounting guidance in Australia on accounting for free or purchased carbon units and any related liabilities under the carbon pricing mechanism. Nor is there an international accounting standard or interpretation which deals specifically with accounting for carbon schemes. In markets where emission trading schemes are already operational, such as in Europe and New Zealand, a variety of acceptable accounting approaches have emerged.

In December 2004, the International Accounting Standards Board (IASB) issued IFRIC 3 *Emission Rights* to address the accounting for emission units or permits that arise from cap and trade emission schemes. The provisions of the interpretation were also considered to be relevant to other schemes designed to encourage reduced levels of emissions and that share some of the features of cap and trade schemes. However, the interpretation met with significant resistance and the IASB decided to withdraw IFRIC 3 in June 2005,

despite the fact that it considered it to be “an appropriate interpretation of existing IFRS”³.

The IASB’s Emission Trading Schemes project commenced in December 2007 in response to requests from several national standard setters to address the issue. The project aims to develop comprehensive guidance on the accounting for the rights and obligations in emission trading schemes. However, this project was put on hold in November 2010. Discussion is expected to recommence later in 2011, but it is unlikely that the project will be finalised before the commencement of the Australian carbon pricing mechanism. It should be noted that prior to the delay in the project, the board tentatively determined that purchased and free carbon units would meet the asset recognition criteria and that an emission liability would exist when the carbon units are allocated. However, many constituents consider that the recognition of such a liability cannot be supported by the current requirements under IFRS. The board will continue to discuss the measurement basis on initial and subsequent recognition of the liability. The board also intends to discuss when and how the emissions obligation is recognised as a liability and whether net presentation of the obligation and the carbon units is appropriate.

Entities should continue to monitor developments on the project. The project could result in greater income statement volatility and require increased tracking of market inputs if the board mandates a fair value approach for initial and subsequent measurement of carbon units and the related scheme obligation⁴.

The Australian Accounting Standards Board (AASB) discussed the accounting for carbon units in its September and October 2011 meetings, however made no decisions. The AASB may however consider and provide guidance on the accounting implications of the carbon pricing mechanism in the future⁵.

IFRIC 3 approach – observations

Those who called for the withdrawal of IFRIC 3 identified a number of accounting mismatches arising from its application:

- ▶ A measurement mismatch between the assets and liabilities recognised in accordance with IFRIC 3, where carbon unit assets are measured at cost and liabilities at the market price or fair value at reporting date.
- ▶ A mismatch in where the gains and losses on those assets are presented. If carbon units are measured at fair value, changes are recognised through other comprehensive income, while costs are recognised in income.
- ▶ A possible timing mismatch because carbon units would be recognised when they are obtained, whereas the emission liability would be recognised during the year as it is incurred.

In light of these accounting mismatches, very few companies have applied IFRIC 3 in practice.

³ *IASB Update*, June 2005, p.1

⁴ For more information refer to our publication, *IASB Projects, A Pocketbook Guide, As at June 2011*, Ernst & Young

⁵ *AASB Action Alert, Number 146*, 9 September 2011

Current accounting policy choices



In the absence of specific guidance, entities must select a method to account for carbon units and associated liabilities that complies with Australian Accounting Standards.

Currently, an entity has the option to either:

- ▶ Apply IFRIC 3 which, as discussed above, despite its withdrawal is still considered to be an appropriate interpretation of existing IFRS
- ▶ Develop its own accounting policy based on the hierarchy of authoritative guidance in AASB 108 Accounting Policies, Changes in Accounting Estimates and Errors

There are two main methods that differ to IFRIC 3 that have gained acceptance under IFRS for schemes already in place: the Net liability approach and the Government grants approach. These approaches, assume that an entity has determined that freely allocated carbon units are intangible assets.

Alternatively, an entity may consider that freely allocated carbon units, in the fixed price period only, are more akin to financial assets and account for them under AASB 139 *Financial Instruments: Recognition and Measurement* as they can be sold back to the Government for a determinable amount of cash. In this case, an entity would initially recognise the freely allocated carbon units at their fair value and corresponding deferred income. Fair value of the freely allocated carbon units is likely to be the amount of cash that the entity could receive from the Government as at the date they are measured. This is a discounted amount as prescribed in the Regulations that will accompany the Legislation Package. Any difference between the fair value of the carbon unit at reporting date and the fair value at initial recognition is recorded as interest income. Deferred income would be recognised on a systematic basis over the periods in which the entity recognises as expenses the related costs for which the grants are intended to compensate. Generally, this is over the compliance period as emissions are made in the case of carbon units allocated to assist an entity to meet its direct emissions obligation, or as increased costs are incurred over the compliance period for carbon units allocated as compensation to an entity with increased energy costs.

Acceptable methods of accounting for the carbon pricing mechanism

1. IFRIC 3 approach

The IFRIC 3 approach requires carbon units purchased or granted for free to be accounted for as intangible assets under AASB 138 *Intangible Assets*.

Free carbon units are measured at fair value on initial recognition and the purchased carbon units are measured at cost on initial recognition. The fair value will need to be determined using a valuation technique or by reference to quoted market prices, depending on whether an active market for carbon units has been established. In the case of free units, any difference between the amount an entity pays for the right (which may be nil) and its fair value is accounted for under AASB 120 *Accounting for Government Grants and Disclosure of Government Assistance*. The amount is recognised as deferred income on the statement of financial position and is recognised in income over the period the emissions are made consistent with the basis on which the expense is recognised, regardless of whether units are held or sold. In the Australian context, this will be the compliance period. Under AASB 138, the entity has the option to continue to measure the units at cost (fair value at grant date) or subsequently measure the units at fair value. The latter is only allowed when there is an active market. Under the fair value option, an increase as a result of a re-measurement to fair value will be accounted for as a revaluation through other comprehensive income. If the carrying amount is decreased as a result of a re-measurement in excess of any credit balance in the revaluation surplus

in respect of that asset, this decrease is required to be immediately recognised in profit and loss.

As emissions are made, a liability is recognised. This liability is measured as the best estimate of the amount required to settle the present obligation at the reporting date. This is usually the market price of the number of units required to cover emissions made at the reporting date.

2. Government grants approach

Under the Government grants approach, carbon units either purchased or granted for free are recognised as intangible assets.

AASB 120 provides the option to either measure the carbon units granted for free at their nominal amount (which may be nil) or at fair value on initial recognition. Entities applying the Government grant approach generally opt to measure these units on initial recognition at their fair value. Therefore, similar to the IFRIC 3 approach, any difference between the amount an entity pays for the right (which may be nil) and its fair value is accounted for as deferred income on the statement of financial position and recognised in income over the compliance period. The purchased carbon units are measured at cost on initial recognition.

A liability is recognised as emissions are made, however, unlike IFRIC 3, different alternatives for the measurement of the emission liability and subsequent measurement of the asset can be applied:

a. Carrying value method

The emission liability is measured by reference to the amounts recorded for the carbon units held as assets that are used to settle the emission liability and at fair value for any shortfall, that is, the current market price for units that will be required to be purchased.

b. Reimbursement rights method

An entity views their purchased carbon units as reimbursement rights in respect of their emission liability. The emission liability is measured at the best estimate of expenditure required to settle the obligation at the reporting date. This is usually the market price of the number of units to cover emissions made at the reporting date. Therefore, to the extent the number of carbon units on hand matches the number of carbon units necessary to settle the emission liability, it can re-measure these purchased units to fair value (market price at reporting date) through profit and loss. Consequently, one part of the purchased units and the liability will be measured at market price, even in the absence of an active market as defined in AASB 138. Carbon units in excess of the liability remain at their measurement at initial recognition of the purchased carbon unit.

3. Net liability approach

Under the net liability approach, carbon units granted for free are recognised at their nominal amount (which may be nil).

Any carbon units purchased by the entity under the net liability approach are measured at cost on initial recognition in accordance with AASB 138.

The entity records a liability only to the extent that actual emissions made exceed the carbon units granted and still held. This reflects an entity's obligation to purchase units to cover emissions made in excess of granted units still on hand and available to remit.

When a provision is recognised, an entity chooses to either measure the emission liability using the carrying value method or measure the emission liability and related purchased units held using the reimbursement rights method as described in point two above.

Irrespective of the approach chosen, no liability is recognised for the expected future shortfall of carbon units as, at the reporting date, there is no current liability in respect of future emissions. The obligating event is the emission itself.

An illustration of the impact on net profit before income tax and balance sheet accounts is included in the following box.

Illustration of impact on net profit and balance sheet accounts

The following three diagrams show the impact on the statement of financial position and net profit before tax in the following scenarios:

- ▶ Scenario A – The fixed price period
- ▶ Scenario B – The flexible price period under the assumption that prices for carbon units increased
- ▶ Scenario C – The flexible price period under the assumption that prices for carbon units decreased

The workings of this example are included in the Appendix to this publication.

Fact set:

Entity A emits 120,000 tonnes of carbon emissions in a compliance year. The following assumptions are made:

- ▶ In Q1, on the 1st of July, Entity A receives free carbon units representing 100,000 tonnes of carbon emissions for that compliance year.
- ▶ In Q2, on the 1st of October, Entity A purchases carbon units representing 20,000 tonnes of carbon emissions.
- ▶ Entity A does not apply the revaluation option available under AASB 138.
- ▶ Entity A has not settled its emission liability at the end of the financial year. The following graphs show the position in the balance sheet and impact on net profit before tax at the end of the compliance year, but before the permits are submitted to settle the liability. See further discussion on page 13 relating to settlement of the liability.
- ▶ Income tax consequences are ignored for illustration only.

The market prices (or fixed price as determined by the government in the fixed price period) in each of the scenarios A to C and carbon emissions during the year are as follows:

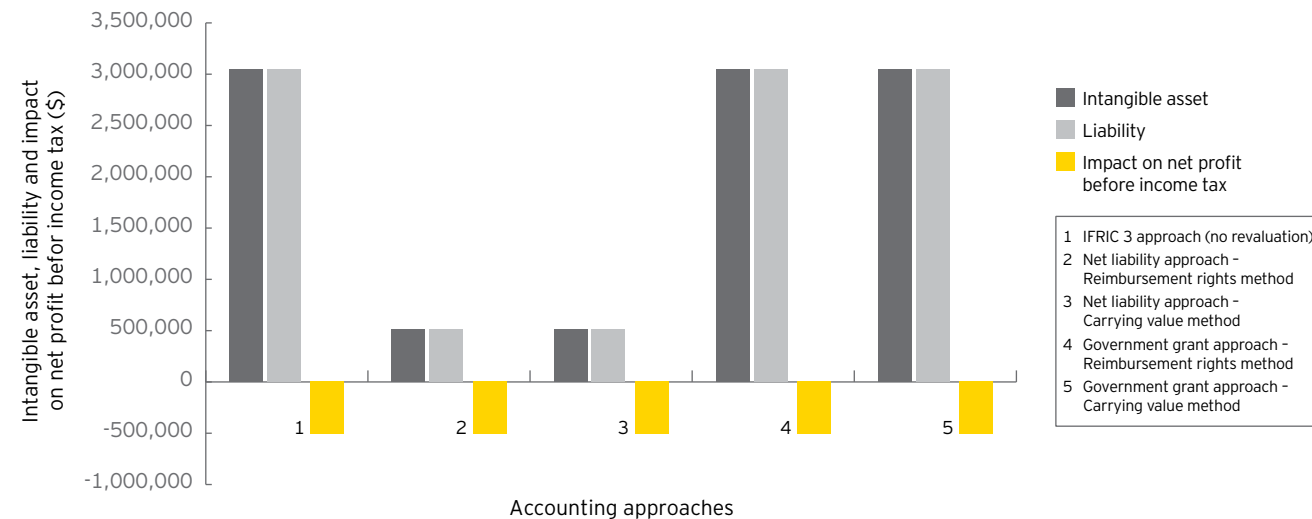
Table 1: Carbon emissions and market prices for scenarios A to C

Quarter	Carbon emissions	Fixed price period	Flexible price period	
		Scenario A	Market price – Scenario B	Market price – Scenario C
Q1	30,000 tonnes	\$25.40/tonne	\$25.40/tonne	\$28.00/tonne
Q2	30,000 tonnes	\$25.40/tonne	\$26.00/tonne	\$27.00/tonne
Q3	30,000 tonnes	\$25.40/tonne	\$27.00/tonne	\$26.00/tonne
Q4	30,000 tonnes	\$25.40/tonne	\$28.00/tonne	\$25.40/tonne

¹ The values assigned to the units are for illustration only and do not reflect the actual values expected for carbon units in Australia.



Diagram 1: Scenario A – Fixed price period

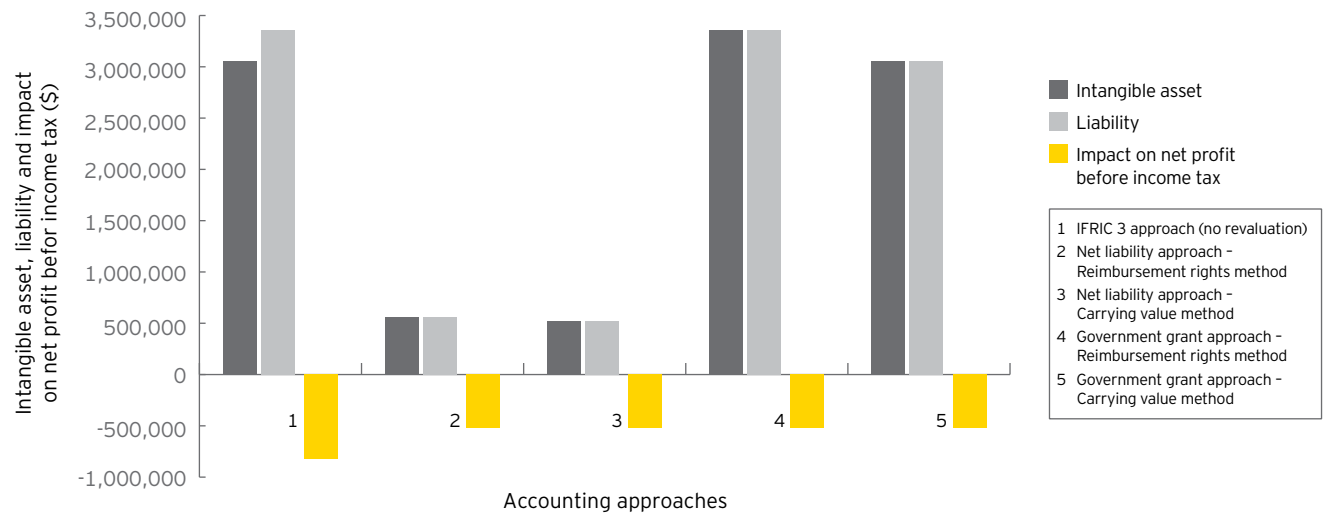




During the fixed price period, irrespective of which approach is applied, the impact on net profit before tax is the same. However, in the statement of financial position, the asset and corresponding liability are lower when the net liability approach is applied.

This diagram presents the impact on the balance sheet as at the reporting date, and the income statement for the financial year. If Entity A prepares an interim report, there will be a mismatch between the intangible asset and the liability under the IFRIC 3 approach and the Government grant approach, as the liability is recognised over the year as the entity emits and the intangible asset is recognised on receipt.

Diagram 2: Scenario B – Flexible price period (market prices increase during the year)



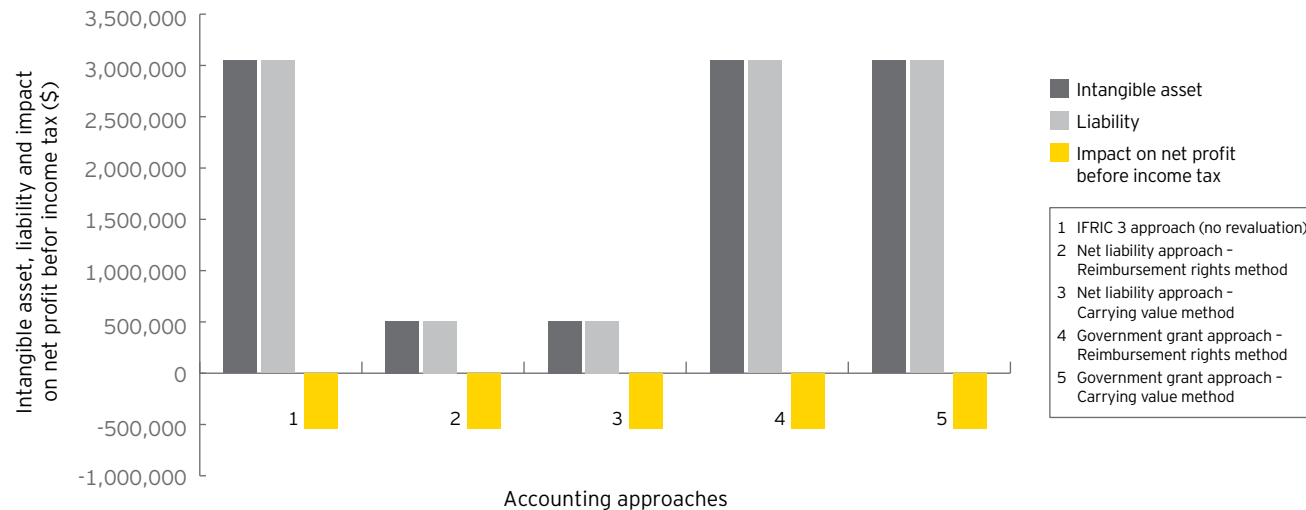
In the flexible price period, where the market prices of carbon units fluctuate during the year, the five potential methods result in differing impacts on net profit before tax and net assets.

Under IFRIC 3, a true up (gain or loss) of the asset to market value of the carbon units is recognised upon settlement of the emission liability. Where the emission liability is settled in a subsequent year, as is the assumption made in this example, this true up is recognised in a subsequent year. As a result, the impact on net profit before income tax, is different under IFRIC 3 compared to the other methods.

Net assets are also impacted when the IFRIC 3 approach is applied. The liability exceeds the intangible asset, due to the mismatch between the measurement of the intangible asset (at cost) and the measurement of the liability (at current value).

If Entity A would have applied the revaluation model under AASB 138, this "deferred gain" would have been recognised in other comprehensive income in the current compliance year. The intangible asset recognised under IFRIC 3 would be equal to the emission liability, however, there still would be an impact on net profit before tax.

Diagram 3: Scenario C – Flexible price period (market prices decreased during the compliance period)



In a market where prices decreased during the compliance period, the impact on net profit before tax is the same under all five methods. This is because entities need to consider impairment of the recognised intangible assets.

Under the reimbursement right methods, the intangible asset is already measured at the market price at year end and therefore no impairment loss is recognised. However, under the carrying value method, the intangible asset would be measured at the higher market price on initial recognition and therefore, entities need to consider recognising an impairment loss. The measurement of the liability follows the measurement of the intangible asset, when applying the carrying value method. Therefore, the impairment loss is offset by an equal but opposite gain on the remeasurement of the emission liability, resulting in nil impact on net profit before tax.

Entities applying the IFRIC 3 approach have already taken the benefit of the lower market price to the income statement, as the liability is measured at the market price of carbon units at year end. They only need recognise the impairment loss on the recognised carbon units.

Carbon units could be tested for impairment as part of a larger cash generating unit. In this case, a decline in market prices may not lead to an automatic impairment charge.

Concluding comments

Entities should consider the following when assessing which of the above described five accounting choices to adopt:

- ▶ If an entity receives free units, then the IFRIC 3 approach and the Government grant methods result in the recognition of an intangible asset and a liability which is higher than when the net liability methods are applied. The higher intangible asset and liability has an impact on debt and gearing ratios, which may have consequences for debt covenants.
- ▶ The IFRIC 3 approach impacts net assets, as a result of the mismatch between the asset and the liability, which may also impact debt covenants. In a market where prices for carbon units increase over the year, net asset backing will reduce as the measurement of the liability is higher than the carrying value of the intangible asset.
- ▶ Entities applying the IFRIC 3 approach (no revaluation) or either of the carrying value methods will have to perform impairment testing on the intangible asset, and on related cash generating units, in a market where market prices decline below the carrying value of the recognised carbon units. The recognition of an impairment loss under the carrying value methods will not have an impact on net profit before tax, as this loss is offset by an equal but opposite adjustment to the measurement of the emissions liability. The impairment charge recognised under the IFRIC 3 approach offsets the benefit taken to the income statement on measurement of the liability at the market price at year end.

When to recognise an intangible asset

Determining when to recognise any carbon units as an intangible asset will depend on the specific circumstances of each entity based upon the industry specific criteria in the Legislation Package and the recognition criteria under AASB 138. For units granted for free, entities will need to consider the recognition criteria under AASB 120.

Derecognition of the emission liability

The emission liability should be derecognised when the obligation has been settled. The point in time when this occurs depends on the specific criteria in the Legislation Package.

In the fixed price period, the purchased units are automatically surrendered to the Government at the same date that an entity purchases them. However, the legal interpretation of the final specifics in the Legislation Package will need to be assessed to determine whether this means that the obligation of that entity has been settled at that point in time, or on the date on which the final true up is performed by the Government body.

Income tax accounting implications

New provisions in the *Income Tax Assessment Act 1997* (the Act) provide for the income tax treatment of carbon units. The income tax effect accounting will depend on the entity's specific facts and circumstances.

The tax base of free and purchased carbon units depends on a number of factors such as:

- ▶ How long the entity holds the units
- ▶ Whether the entity sells the units or surrenders them to the Government to settle its carbon obligation

For carbon units allocated for free, the tax base also depends on whether they were received for EITE activities or not. The resulting tax base of the carbon units may be different to their carrying value in the financial statements depending on the accounting policy selected as discussed above.

Resulting taxable or deductible temporary differences may not be recognised in the financial statements if the transaction qualifies for the initial recognition exemption provided in AASB 112 *Income Taxes*. It is important to note that subsequent changes in the tax base, however, could trigger deferred tax consequences.

To the extent expenses arise from actual carbon emissions, these may give rise to additional deferred tax consequences.



Other accounting impacts to consider

Entities may also need to consider the following matters, depending on their specific facts and circumstances.

1. Carbon units acquired in a business combination

In a business combination an acquirer must recognise the acquiree's identifiable intangible assets (including carbon units) at their fair value. Therefore, any carbon units recorded at nil in the acquiree's financial statements will be recognised at fair value in the acquirer's consolidated financial statements. Consequently, an acquirer cannot apply the net liability approach to carbon units acquired in a business combination, as the units were not granted through a Government grant. Instead, the acquirer should treat acquired carbon units in the same way as purchased carbon units. An acquiree may however continue to apply its own accounting policy in its separate financial statements.

An acquirer can only recognise a provision for its acquiree's actual emissions that have occurred up to the reporting date (and not for forecast emissions).

2. Accounting by brokers/traders

In the flexible price period, liable entities and broker/traders may hold carbon units for sale in the ordinary course of their business. These units meet the definition of inventory and can be recorded at either the lower of cost and net realisable value or at fair value less costs to sell in accordance with their policy as permitted by AASB 102 *Inventories*.

3. Forward contracts for carbon units

In the flexible price period, if an entity enters into a forward contract to sell or purchase carbon units, it needs to consider whether the contract is a derivative within the scope of AASB 139 *Financial Instruments: Recognition and Measurement*, based on the criteria in this standard.

An entity may enter into forward contracts to sell carbon units. If the entity does not have a past practice of net settlement or an intention of actively trading carbon units, the forward contract may have been entered for "own use purposes" and would not be within the scope of AASB 139. Although it is not the entity's business to sell carbon units forward, it could still be considered to be a normal sale transaction as the quantity of carbon units received is not within the control of the entity.

An entity may also enter into forward contracts to purchase carbon units. This may be to supplement a shortfall in carbon units held compared with actual or projected emissions. An entity must assess whether it has a past practice of net settlement or an intention of actively trading carbon units.

If the forward contract has been entered into for "own use purposes" then it would not be within the scope of AASB 139 if the carbon units will be physically delivered under the contract.

However, an entity may actively trade carbon units at the same time and be unable to determine which forward contracts will result in purchase or sale of carbon units for own use. Own use accounting cannot be applied if there are no controls in place to separate forward contracts entered into for trading purposes and those for own use.

4. Impairment of assets

Both before and after the commencement date, the carbon pricing mechanism may be an impairment indicator for goodwill and other tangible and intangible assets, if entities do not have the ability to pass on costs. These entities will need to re-evaluate the appropriateness of valuation models used – for both value-in-use and fair value measures; and reassess assumptions used in those models. Financial statements will need to include disclosures of assumptions used in impairment testing, (including for periods beyond the initial fixed price period), the size of the potential impact and the sensitivity of those assumptions.

5. Onerous contracts

The carbon pricing mechanism may lead to onerous contracts, if entities are not able to pass on costs, as a result of which the economic benefits expected to be received under the contract will become lower than the costs of meeting the obligations under it. Entities, therefore, need to consider whether they should recognise a provision in accordance with AASB 137.

6. Impact on budgeting and forecasting

As noted above, entities may be impacted directly (for liable entities) and/or indirectly (through increased prices of energy and goods and services from a flow through of the carbon price across the domestic supply chain). Entities should consider updating assumptions used in their budgets and forecasts, to reflect these anticipated price increases. The direct impacts can easily be established in the fixed price period, as in this period the price for carbon units has been pre-determined by the Government. This may not be so easy in the flexible price period. The indirect impacts in both the fixed and flexible price periods also may be more difficult to estimate.

7. Impact on inventory costing

The costs attributable to inventories under AASB 102 comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Entities need to consider including the costs resulting from the introduction of the carbon pricing mechanism into their inventory costing if these costs are regarded as a cost that is incurred in bringing goods to their present location and condition (and not a cost relating to idle capacity).

Similarly, the carbon emission cost resulting from the delivery of a service should be considered part of the cost of that service (e.g. transportation companies) and should be accounted for similarly to other costs of that service.

Actions to take now

The release of the Legislation Package provides opportunities for entities to make necessary strategic decisions to get ready for the commencement of the carbon pricing mechanism. Financial reporting decisions should form part of an entity's overall approach to managing this change. With a confirmed start date of 1 July 2012, the time to implement strategies to manage change is short and challenging. It is therefore important to identify and act on key issues now to minimise disruption to your business and avoid last-minute surprises.

Entities should consider which accounting policies to apply by modelling the potential impact, based on their individual

circumstances. The impact on an entity's financial statements may be significantly different in the fixed price period and the flexible price period, even when applying the same accounting policy to both of these periods. This may impact financial ratios and debt covenants as a result. Flow-on effects to other parts of the financial statements also need to be considered, such as impairment of recognised carbon units, and income tax accounting implications. Entities with overseas operations should also consider whether these operations already account for emissions under a cap and trade scheme and determine how to apply a consistent accounting policy across the group.

It is also important to consider how the processes that will be put in place as a result of these new accounting requirements will be subject to appropriate internal control procedures. For example, ensuring that there are appropriate controls in place to measure emission volumes used in the measurement of the emission liability at half-year or year-end. A further consideration is how to track information for management reporting purposes to facilitate decision making on a timely basis.

Conclusion

The Legislation Package is complex and assessing its full impact will require a comprehensive strategy for many entities. Communicating the financial impact should form a part of this strategy. Determining an appropriate accounting policy and internal reporting mechanism early will ensure that entities are in the right position to be ready for the commencement of the carbon pricing mechanism.

Appendix A

Example of measurement options

The following three tables show the impact on the statement of financial position and net profit before tax in the following scenarios:

- ▶ Scenario A – The fixed price period
- ▶ Scenario B – The flexible price period under the assumption that prices for carbon units increased
- ▶ Scenario C – The flexible price period under the assumption that prices for carbon units decreased

Fact set:

Entity A emits 120,000 tonnes of carbon emissions in a compliance year. The following assumptions are made:

- ▶ In Q1, on the 1st of July, Entity A receives free carbon units representing 100,000 tonnes of carbon emissions for that compliance year.
- ▶ In Q2, on the 1st of October, Entity A purchases carbon units representing 20,000 tonnes of carbon emissions.
- ▶ Entity A does not apply the revaluation option available under AASB 138.
- ▶ Entity A has not settled its emission liability at the end of the financial year. The following tables show the position in the balance sheet and impact on net profit before tax at the end of the compliance year, but before the units are submitted to settle the liability. Entity A surrenders its carbon units to settle its emission liability in the following compliance year.
- ▶ Income tax consequences are ignored for illustration only.

Example 1: Scenario A – Fixed price period:

The fixed price as determined by the Government and carbon emissions during the compliance period are as follows:

Quarter	Carbon emissions	Fixed price
Q1	30,000 tonnes	\$25.40/tonne
Q2	30,000 tonnes	\$25.40/tonne
Q3	30,000 tonnes	\$25.40/tonne
Q4	30,000 tonnes	\$25.40/tonne

The impact of the alternative accounting approaches is summarised below:

	IFRIC 3 approach	Net liability approach		Government grant approach	
		Reimbursement rights method	Carrying value method	Reimbursement rights method	Carrying value method
Asset					
Recognise free carbon units in Q1:	\$2,540,000 (100,000x\$25.40)	\$0	\$0	\$2,540,000 (100,000x\$25.40)	\$2,540,000 (100,000x\$25.40)
Recognise purchased carbon units in Q2:	\$508,000 (20,000x\$25.40)	\$508,000 (20,000x 25.40)	\$508,000 (20,000x\$25.40)	\$508,000 (20,000x\$25.40)	\$508,000 (20,000x\$25.40)
Revalue carbon units on hand as at reporting date	N/A (1)	N/A (2)	N/A (1)	N/A (2)	N/A (1)
Total intangible assets at reporting date	\$3,048,000	\$508,000	\$508,000	\$3,048,000	\$3,048,000
Liability					
Balance of liability at reporting date	\$3,048,000 (120,000x\$25.40)	\$508,000 (20,000x\$25.40)	\$508,000 (20,000x\$25.40)	\$3,048,000 (120,000x\$25.40)	\$3,048,000 (120,000x\$25.40)
Impact on profit and loss					
Total expense for the year	-\$3,048,000 (120,000x\$25.40)	-\$508,000 (20,000x\$25.40)	-\$508,000 (20,000x\$25.40)	-\$3,048,000 (120,000x\$25.40)	-\$3,048,000 (120,000x\$25.40)
Total income for year	\$2,540,000 (100,000x\$25.40)	\$0	\$0	\$2,540,000 (100,000x\$25.40)	\$2,540,000 (100,000x\$25.40)
Impact on net profit before income tax for the year	-\$508,000	-\$508,000	-\$508,000	-\$508,000	-\$508,000

(1) Revaluation of intangible assets is not allowed under the IFRIC 3 (unless the revaluation model of AASB 138 is applied) or under the carrying value methods.

(2) The reimbursement methods allow revaluation, but in the fixed price period, this would not result in an impact.

Note – The values assigned to the units are for illustration only and do not reflect the actual values expected for carbon units in Australia.

Example 2: Scenario B – Flexible price period: Market prices increase during the compliance period

The market price of carbon units and the actual carbon emissions during the year are as follows:

Quarter	Carbon emissions	Market price
Q1	30,000 tonnes	\$25.40/tonne
Q2	30,000 tonnes	\$26.00/tonne
Q3	30,000 tonnes	\$27.00/tonne
Q4	30,000 tonnes	\$28.00/tonne

Note: The values assigned to the carbon units are for illustration only and do not reflect the actual values expected for carbon units in Australia.

The impact of the alternative accounting approaches is summarised below:

	IFRIC 3 approach	Net liability approach		Government grant approach	
		Reimbursement rights method	Carrying value method	Reimbursement rights method	Carrying value method
Asset					
Recognise free carbon units in Q1:	\$2,540,000 (100,000x\$25.40)	\$0	\$0	\$2,540,000 (100,000x\$25.40)	\$2,540,000 (100,000x\$25.40)
Recognise purchased carbon units in Q2:	\$520,000 (20,000x\$26)	\$520,000 (20,000x\$26)	\$520,000 (20,000x\$26)	\$520,000 (20,000x\$26)	\$520,000 (20,000x\$26)
Revalue carbon units on hand as at reporting date	N/A	\$40,000 (20,000x\$28-\$26)	N/A	-\$292,000 (-\$20,000x (\$27-\$25.4)+ -\$100,000x (\$28-\$25.4))	N/A
Total intangible assets at reporting date	\$3,060,000	\$560,000	\$520,000	\$3,360,000	\$3,060,000
Liability					
Balance of liability at reporting date	\$3,360,000 (120,000x\$28)	\$560,000 (20,000x\$28)	\$520,000 (20,000x\$26)	\$3,360,000 (120,000x\$28)	\$3,060,000 (100,000x\$25.4 +20,000x\$26)
Impact on profit and loss					
Total expense for the year	-\$3,360,000 (120,000x\$28)	-\$560,000 (20,000x\$28)	-\$520,000 (20,000x\$26)	-\$3,360,000 (120,000x\$28)	-\$3,060,000 (100,000x\$25.4 +20,000x\$26)
Total income for year (1)	\$2,540,000 (100,000x\$25.4)	\$40,000 (20,000x(\$28-\$26))	\$0	\$2,840,000 (100,000x \$25.4)+(100,000x [\$28-\$25.4])+20,000 x[\$28-\$26])	\$2,540,000 (100,000x\$25.4)
Impact on net profit before income tax for the year	-\$820,000	-\$520,000	-\$520,000	-\$520,000	-\$520,000

(1) Being the amortisation of the grant to the income statement and the revaluation of the carbon units to fair value, which is recognised in the income statement as required by the reimbursement rights method.

Example 3: Scenario C – Flexible price period: Market prices decrease during the compliance period

The market price of carbon units and the actual carbon emissions during the year are as follows:

Quarter	Carbon emissions	Market price
Q1	30,000 tonnes	\$28.00/tonne
Q2	30,000 tonnes	\$27.00/tonne
Q3	30,000 tonnes	\$26.00/tonne
Q4	30,000 tonnes	\$25.40/tonne

Note: The values assigned to the carbon units are for illustration only and do not reflect the actual values expected for carbon units in Australia.

The impact of the alternative accounting approaches is summarised below:

	IFRIC 3 approach	Net liability approach		Government grant approach		
		Reimbursement rights method	Carrying value method	Reimbursement rights method	Carrying value method	
Asset						
Recognise free carbon units in Q1:	\$2,800,000 (100,000x\$28)		\$0	\$0	\$2,800,000 (100,000x\$28)	\$2,800,000 (100,000x\$28)
Recognise purchased carbon units in Q2:	\$540,000 (20,000x\$27)	\$540,000 (20,000x\$27)	\$540,000 (20,000x\$27)	\$540,000 (20,000x\$27)	\$540,000 (20,000x\$27)	\$540,000 (20,000x\$27)
Revalue carbon units on hand as at reporting date	N/A	-\$32,000 (20,000x(\$27-\$25.4))	N/A	-\$32,000 (20,000x(\$27-\$25.4))	N/A	N/A
Impairment loss at reporting date	-\$292,000 (100,000 x [\$25.4-\$28]+20,000 x [\$25.4-\$27])		-\$32,000 (20,000x(\$27-\$25.4))		-\$292,000 (100,000x [\$25.4-\$28]+20,000 x[\$25.4-\$27])	
Total intangible assets at reporting date	\$3,048,000	\$508,000	\$508,000	\$3,048,000	\$3,048,000	
Liability						
Balance of liability at reporting date	\$3,048,000 (120,000x\$25.4)	\$508,000 (20,000x\$25.4)	\$508,000 (20,000x\$25.4)	\$3,048,000 (120,000x\$25.4)	\$3,048,000 (120,000x\$25.4)	
Impact on profit and loss						
Total expense for the year	-\$3,048,000 (120,000x\$25.4)	-\$508,000 (20,000x\$25.4)	-\$508,000 (20,000x\$25.4)	-\$3,048,000 (120,000x\$25.4)	-\$3,048,000 (120,000x\$25.4)	
Total income for the year (1)	\$2,800,000 (100,000x\$28)	-\$32,000 (20,000x(\$27-\$25.4))	\$0	\$2,508,000 (100,000x \$28)+(100,000x [\$25.4-\$28]+20,000 x[\$25.4-\$27])	\$2,800,000 (100,000x\$28)	
Impairment loss	-\$292,000 (100,000 x [\$25.4-\$28]+20,000 x [\$25.4-\$27])		-\$32,000 (20,000x(\$27-\$25.4))		-\$292,000 (100,000x[\$25.4-\$28]+20,000x [\$25.4-\$27])	
Impact on net profit before income tax for the year	-\$540,000	-\$540,000	-\$540,000	-\$540,000	-\$540,000	

(1) Being the amortisation of the grant to the income statement and the revaluation of the carbon units to fair value, which is recognised in the income statement as required by the reimbursement rights approach.

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