

STAFF PAPER

June 2015

IASB Meeting

Project	Pollutant Pricing Mechanisms (formerly Emissions Trading Schemes)		
Paper topic	Comparison of possible approaches—a simplified example		
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This paper has been prepared for discussion at a public meeting of the IASB and does not represent the views of the IASB or any individual member of the IASB. Comments on the application of IFRSs do not purport to set out acceptable or unacceptable application of IFRSs. Technical decisions are made in public and reported in IASB *Update*.

Purpose of the paper

1. The purpose of this paper is to provide a numerical example to aid discussion about the possible accounting approaches that could be considered in developing a Discussion Paper for the Pollutant Pricing Mechanisms project. The paper provides a simplified example of a typical cap-and-trade type of emissions trading scheme and how different accounting approaches produce different results in the statements of financial position and profit and loss and other comprehensive income.
2. The approaches outlined represent the three common approaches used in practice, as identified in a survey by PwC and the International Emissions Trading Association (IETA).¹ In addition, a fourth approach has been included, which the staff has not seen being applied in practice. We are working collaboratively with staff of the International Public Sector Accounting Standards Board (IPSASB) who asked us to include it. This is because it represents an approach that is more closely aligned with International Public Sector Accounting Standard 23 *Revenue from Non-Exchange Transactions (Taxes and Transfers) (IPSAS 23)*. The IPSASB will be discussing the four approaches in its June meeting (to be held from 23-26 June 2015).

¹ See Appendix A.

3. There are six examples contained in Appendix C, which are used to demonstrate these four approaches. The fact pattern used for all of the examples is the same; only the accounting entries change. The fact pattern used is the same as that contained in Agenda Paper 4B for the joint meeting of the Capital Markets Advisory Committee (CMAC) and the Global Preparers Forum (GPF) to be held on 11-12 June 2015 (see Appendix B).
4. The examples provided focus only on Entity 1 in the CMAC/GPF Agenda Paper 4B. There are other variants of the approaches. These are discussed briefly in this paper but are not set out as examples to avoid excessive detail.

Objectives of the discussion

5. As noted in Agenda Paper 6A, the staff are seeking to take a fresh approach to the issues around pollutant pricing mechanisms in general; with a focus initially on cap-and-trade emissions trading schemes. At this time, the staff would like the IASB to focus initially on the financial or economic effects of ETS and how best to report those effects. At this stage, we are looking at generating thought-provoking ideas and possible approaches. The staff will then analyse any possible models that the IASB would like to explore in more detail through the Discussion Paper. This analysis will involve comparison to the concepts in the *Conceptual Framework* and the existing requirements of IFRS.
6. Using the fact pattern provided for Entity 1, we would like IASB members to focus on what they see as being the economics of the fact pattern and how best to report the financial effects. We do not recommend any particular approach. The examples are provided as a starting-point for the discussion. If possible, we would like to hear whether IASB members have any preference for any of the approaches demonstrated or any others identified during the discussion and, if so, why. This will help us to focus our efforts and resources as we progress the project.
7. The fact pattern for Entity 1 is very simple. The entity receives 5,000 allowances for the year and expects to emit pollutants equivalent in volume to the 5,000 allowances received. Actual results follow expectations.

8. As noted, we would like initially to focus on this simplified example. Further examples (Entities 2-5) are included in Appendix B. The fact pattern for each of the other entities is based on the same background information, but the circumstances of each entity differ slightly in order to demonstrate added complexity in the situation. As time permits during the meeting, we would like to move on to these further examples once we have discussed Entity 1.

Summary of the accounting approaches presented

9. As summarised in the table in Appendix A, Approaches 1 and 2 are both ‘gross presentation’ approaches. They take the same approach to recognition and measurement of the allowances, government grant and the recognition of the liability as follows:
- (a) Both recognise allowances that have been allocated free of charge as well as those purchased.
 - (b) Both measure allowances that have been allocated free of charge at fair value on initial recognition and any purchased allowances at cost.
 - (c) Both recognise a government grant for the difference between the initial fair value and the cost, if any, of allowances received from the government free of charge or at a discounted price. The government grant is amortised on a systematic basis over the compliance period for which the allowances were issued, regardless of whether the allowances are held or sold.
 - (d) Both subsequently measure allowances at either cost or fair value.
 - (e) Both recognise a liability to submit allowances to the scheme administrator as emissions are made.
10. The main difference between Approaches 1 and 2 relates to the measurement of the liability.
- (a) Approach 1 measures the liability based on the actual amount of emissions made during the period multiplied by the market value of allowances at each period end that would be required to cover actual

emissions, regardless of whether the allowances are on hand or would be purchased from the market.

(b) Approach 2 measures the liability based on:

- (i) the carrying amount of allowances on hand at each period end to be used to cover actual emissions (ie market value at date of recognition if the cost model is used; market value at date of revaluation if the revaluation model is used) on either a FIFO or weighted average basis; plus
- (ii) the market value of allowances at each period end that would be required to cover any excess emissions (ie actual emissions in excess of allowances on hand).

11. The requirements set out in the withdrawn IFRIC 3 use Approach 1. Examples 1 and 2 demonstrate the IFRIC 3 approach, in which the allowances are classified as intangible assets. In Example 1, the allowances are subsequently measured using the cost model of IAS 38 *Intangible Assets*. In Example 2, the allowances are subsequently measured using IAS 38's revaluation model.
12. As noted in Agenda Paper 6A, one of the problems raised by stakeholders about the revaluation model in IFRIC 3 was the mismatch between changes in the measurement of allowances recognised through other comprehensive income (OCI) and the remeasurement of the liability recognised through profit or loss. In response, the IASB considered amending IAS 38 to recognise the change in measurement of the allowances through profit or loss, instead of through OCI. This approach is demonstrated in Example 3 in Appendix C. The IASB subsequently suspended work on the (then) Emissions Trading Schemes project and the proposals to amend IAS 38 were not pursued further, nor were they published (see paragraph BC17-BC18 of the Basis for Conclusions on IFRIC 3).
13. Approach 2 is demonstrated in Example 4, which uses the cost model for the subsequent measurement of allowances. In Approach 2, the liability for emissions made to date is measured on the same basis as the allowances on hand. In cases in which there is a shortfall of emissions on hand, the market value of allowances at the reporting period end is used to measure the shortfall.
14. In the example presented, the entity does not expect to emit more pollutants than it has allowances. However, if an entity does expect to need to acquire additional

allowances for excess emissions, the question arises about whether a liability for the shortfall should only be recognised when all allowances on hand have been allocated to actual emissions made during the period, or whether a liability should be accrued through the compliance period, based on the estimated total shortfall for the year.

15. The third approach summarised in the table in Appendix A is sometimes considered to be a ‘net presentation’ approach, but this is really only an accurate description when the allowances on hand have all been allocated free of charge (ie have a nil cost). In such a case, the allowances are not recognised and a liability is only recognised for any shortfall, using the market value of allowances at the period end. Example 5 demonstrates this approach.
16. However, in cases in which some of the allowances on hand have been purchased and recognised at cost, the asset (allowances on hand) would be presented in the statement of financial position separately from the liability for the shortfall. This is equivalent to the ‘gross presentation’ approach demonstrated in Example 4.
17. A variant of this approach is to set off or net the allowances asset and the emissions liability and present only the net position. This ‘net presentation’ approach is not demonstrated in this paper because it produces the same profit or loss entries as Approach 3, as demonstrated in Example 5. A further variant of this approach would be to provide a ‘net presentation’ in the statement of financial position. In such a case, the monetary amount of the asset and the monetary amount of the liability would be presented in the statement of financial position on adjacent line items. As a result, the gross amounts of each item would be shown, but only the net amount would be included in the subtotal drawn for either total assets or total liabilities.
18. Example 6 is a variant on Example 1 and demonstrates Approach 4. Approach 4 is based on a view that the receipt of the allowances that have been allocated to the entity free of charge is either an unconditional government grant, or a grant to compensate the entity for expenses or losses already incurred or to provide immediate relief.

Questions for the IASB

Questions for the IASB

1. Do members of the IASB have a preference for any of the approaches demonstrated in the examples in Appendix C or another approach? If so, why?
2. Do you have any comments about the nature of any of the assets or liabilities that you think should be reported?
3. Do you suggest any alternative approaches?
4. Do you think that all of the approaches identified should be included in the Discussion Paper, even if one or more of the approaches are considered inappropriate to pursue further? If not, which approach(es) should be excluded?
5. Do IASB members have any further comments on the accounting issues identified through Entity 1 and any further examples discussed that the staff should consider in a future paper to be brought to the IASB?

Appendix A: Approaches applied in practice to account for cap-and-trade schemes

In the absence of authoritative guidance by the IASB, several approaches have developed that IFRS preparers apply to account for the effects of emissions trading schemes. A survey by PwC and the International Emissions Trading Association (IETA) identified as many as fifteen variations to account for the effects of EU ETS.² The following table highlights the three main approaches.

A fourth approach (initially measuring the allowances allocated free of charge at fair value with the corresponding entry to income, instead of to government grant deferred income) is added for completeness.

² See ‘Trouble-entry accounting—Revisited: Uncertainty in accounting for the EU Emissions Trading Scheme and Certified Emission Reductions.’ (http://www.ieta.org/assets/Reports/trouble_entry_accounting.pdf)

		Approach 1	Approach 2	Approach 3	Approach 4
Initial recognition	<i>Allocated allowances</i>	Recognise and measure at market value at date of issue; corresponding entry to government grant.		Recognise and measure at cost, which for granted allowances is nil .	Recognise and measure at market value at date of issue; corresponding entry to income (Day 1 gain).
	<i>Purchased allowances</i>	Recognise and measure at cost .			
Subsequent treatment	of allowances	Allowances are subsequently measured at cost or market value , subject to review for impairment.		Allowances are subsequently measured at cost , subject to review for impairment.	Allowances are subsequently measured at cost or market value , subject to review for impairment.
	of government grant	Government grant amortised on a systematic and rational basis over compliance period .		Not applicable.	Not applicable.
Liability	Recognition	Recognise liability when incurred (ie as emissions are produced).		Recognise liability when incurred (ie as emissions are produced). However, the way in which the liability is measured (see below) means that often no liability is shown in the statement of financial position until emissions produced exceed the allowances allocated to the participant.	Recognise liability when incurred (ie as emissions are produced).

		Approach 1	Approach 2	Approach 3	Approach 4
Liability	Measurement	Liability is measured based on the market value of allowances at each period end that would be required to cover actual emissions, regardless of whether the allowances are on hand or would be purchased from the market.	Liability is measured based on: <ul style="list-style-type: none"> the carrying amount of allowances on hand at each period end to be used to cover actual emissions (ie market value at date of recognition if cost model is used; market value at date of revaluation if revaluation model is used) on either a FIFO or weighted average basis; <i>plus</i> the market value of allowances at each period end that would be required to cover any excess emissions (ie actual emissions in excess of allowances on hand). 	Liability is measured based on: <ul style="list-style-type: none"> the carrying amount of allowances on hand at each period end to be used to cover actual emissions (nil or cost) on a FIFO or weighted average basis; <i>plus</i> the market value of allowances at each period end that would be required to cover any excess emissions (ie actual emissions in excess of allowances on hand). 	Liability is measured based on either Approach 1 or Approach 2.

Appendix B: Copy of Agenda Paper 4B from the joint meeting of CMAC and GPF to be held in June 2015

STAFF PAPER

11-12 June 2015

Prepared for the joint Capital Markets Advisory Committee and Global Preparers Forum Meeting

Project	Pollutant Pricing Mechanisms		
Paper topic	Example—cap-and-trade emission trading scheme		
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This paper has been prepared for discussion at a public meeting of the CMAC and GPF. The views expressed in this paper reflect the individual views of the author and not those of the IASB nor of the IFRS Foundation. Comments made in relation to the application of an IFRS do not purport to be acceptable or unacceptable application of that IFRS.

Introduction

1. The purpose of this Agenda Paper is to provide members of the Capital Markets Advisory Committee (CMAC) and Global Preparers Forum (GPF) with a practical example to discuss within four break-out groups during the Joint CMAC/GPF meeting.
2. This Agenda Paper sets out a simplified fact pattern for five participants in a new cap-and-trade style emissions trading scheme (ETS). The background facts about the scheme apply equally to all five participants. Entity-specific information is then provided for each of the five participants, to explore different scenarios.
3. During the break-out sessions, we would like members to consider what information they think is most relevant to include in the financial statements for each of the five entities. In particular, we would like each group to identify what assets, liabilities, gains and losses they would find useful to report, or to see reported, in the financial statements on 1 January 2015, 31 December 2015 and at the end of any interim financial reporting period.

4. We would like members to focus on the nature of any items to be recognised, when they should be recognised and how they should be measured, instead of trying to calculate any amounts involved.
5. Because the allocated time will not permit every group to address every scenario, we have allocated a different scenario to each group. During the session in which the group leaders report back on the conclusions of their own group's discussion, we encourage all members to also take part in discussing the conclusions of the other groups.

General fact pattern applicable to all four participants

6. The following information relates to five entities, each of which publishes IFRS financial statements and carries out business operations in Country X. Each entity prepares annual financial statements for the calendar year and quarterly interim financial statements.
7. Up to and including the year-ended 31 December 2014, there were no restrictions on the number of tonnes of carbon dioxide equivalents (tCO₂e) that each entity could emit. During the year 2013, the government of Country X announced that, from 1 January 2015, a new cap-and-trade ETS would apply to 100 named entities (the participants) that operate specified installations that have been identified as emitting material quantities of greenhouse gases.
8. As part of the announcement, the government confirmed that in 2015, the first year of the scheme, it would issue, free of charge, allowances equivalent to the volume of tCO₂e emitted by the 100 named participants during the base measurement year of 1 July 2013 to 30 June 2014. The number of free allowances allocated will form the 'baseline' cap on total tCO₂e emissions by all 100 participants for the year ended 31 December 2015.
9. Allowances will be allocated only to participants in the scheme, in the quantities announced at the start of the commitment period. The government will not sell or otherwise issue any other allowances. Participants can sell their allocated allowances, either to other participants in the scheme or to other entities that are not participants but that may wish to trade in allowances.

10. The first phase of the scheme consists of a 5-year commitment period. This commitment period is divided into five compliance years, each ending 31 December. During this 5-year commitment period, the total number of free allowances allocated to participants will be reduced annually, on a straight-line basis. As a result, the number of free allowances to be allocated in the fifth year, that is, for the 2019 compliance year, will be 20 per cent lower than for 2015.
11. The government will transfer allowances allocated free of charge to participants on 1 January each year, beginning on 1 January 2015. On or before 1 April each year, beginning on 1 April 2016, participants must deliver to the government, which acts as the ETS administrator, the number of allowances that are equivalent to their actual tCO₂e emissions for the preceding compliance year.
12. The allowances are not ‘dated’. This means that an entity can carry forward unused allowances to future years and carry back allowances received for the next compliance year to the previous compliance year. For example, allowances received on 1 January 2016 can be submitted to the government:
 - (a) on 1 April 2016 to satisfy the obligation arising from tCO₂e emissions during the compliance year 2015; or
 - (b) on 1 April 2017 to satisfy the obligation arising from tCO₂e emissions during the compliance year 2016; or
 - (c) on 1 April 2018 or 2019 to satisfy the obligation arising from tCO₂e emissions during the compliance year 2017 or 2018.
13. Each of the 100 named participants will receive its annual allocation of allowances as long as the specified installation is operating on 1 January in each compliance year. If a participant ceases production at the specified installation, it will have an obligation to return the number of allowances equivalent to its tCO₂e emissions up to the date of closure. It is not obliged to return any unused allowances. However, after production ceases, the entity will not receive any further allowances for the remaining years within the commitment period, unless production is transferred to an approved replacement installation.

14. On 1 January 2015, the government issued allowances equivalent to 200,000 tCO₂e. The market value of allowances was CU10³ on 1 January 2015, CU9 on 31 December 2015 and CU14 on 1 April 2016.

Specific fact patterns applicable to individual participants

Entity 1

15. On 1 January 2015, Entity 1 received 5,000 allowances, which are equivalent to 5,000 tCO₂e emissions. This is equal to the amount of emissions that Entity 1 expects to emit during 2015.
16. The management of Entity 1 do not intend to buy or sell any allowances during 2015. They intend to hold the 5,000 allowances and use them to settle the expected obligation to submit 5,000 allowances to the government on 1 April 2016.
17. During 2015, Entity 1 emitted 5,000 tCO₂e. It did not buy or sell any allowances during 2015 and submitted the 5,000 allowances received in January 2015 to the government on 1 April 2016.
18. Entity 1 was still operating on 1 January 2016 and received its promised allocation of 4,750 allowances for the 2016 compliance year [5,000 - (5,000 × 20% / 4 years), see paragraph 10].

Entity 2

19. On 1 January 2015, Entity 2 received 5,000 allowances, which are equivalent to 5,000 tCO₂e emissions. This is equal to the amount of emissions that Entity 2 expects to emit during 2015.
20. The management of Entity 2 intend to hold 3,000 of the allowances received and use them to settle part of the expected obligation to submit 5,000 allowances to the government on 1 April 2016. The remaining 2,000 allowances will be traded in the market, with the aim of making short-term profits before using them to settle the

³ In this agenda paper, currency amounts are denominated in 'currency units' (CU).

remaining portion of the expected obligation to submit 5,000 allowances to the government on 1 April 2016.

21. During 2015, Entity 2 emitted 5,000 tCO₂e. It sold 2,000 allowances on 1 January 2015 for CU20,000 (2,000 × CU10) and bought 2,000 allowances on 31 December 2015 for CU18,000 (2,000 × CU9). Entity 2 submitted the 3,000 allowances received in January 2015 plus the 2,000 purchased in December 2015 to the government on 1 April 2016.
22. Entity 2 was still operating on 1 January 2016 and received its promised allocation of 4,750 allowances for the 2016 compliance year [5,000 - (5,000 × 20% / 4 years), see paragraph 10].

Entity 3

23. On 1 January 2015, Entity 3 received 5,000 allowances, which are equivalent to 5,000 tCO₂e emissions. This is 500 tCO₂e less than the 5,500 tCO₂e of emissions that Entity 3 expects to emit during 2015.
24. The management of Entity 3 do not intend to sell any allowances during 2015. They intend to hold the 5,000 allowances allocated free of charge and use them to settle part of the expected obligation to submit 5,500 allowances to the government on 1 April 2016. Entity 3 intends to monitor the price of allowances in the market before deciding when to purchase the additional 500 allowances needed to settle its expected compliance obligation.
25. During 2015, Entity 3 emitted 5,500 tCO₂e. It did not sell any allowances during 2015. It purchased the additional 500 allowances needed on 4 February 2016 at a cost of CU11 per tCO₂e. Entity 3 submitted 5,500 allowances to the government on 1 April 2016.
26. Entity 3 was still operating on 1 January 2016 and received its promised allocation of 4,750 allowances for the 2016 compliance year [5,000 - (5,000 × 20% / 4 years), see paragraph 10].

Entity 4

27. On 1 January 2015, Entity 4 received 5,000 allowances, which are equivalent to 5,000 tCO₂e emissions. This is 400 tCO₂e more than the 4,600 tCO₂e of emissions that Entity 4 expects to emit during 2015. Late in 2014, one of Entity 4's major customers decided not to renew its contract with Entity 4. Until Entity 4 finds a replacement customer, its production levels and consequential amounts of tCO₂e emissions are expected to remain below its 2013-14 baseline level.
28. The management of Entity 4 do not intend to sell any allowances during 2015. They intend to hold the 5,000 allowances allocated free of charge and use them to settle the expected obligation to submit 4,600 allowances to the government on 1 April 2016. The remaining 400 allowances will be retained until Entity 4 can establish whether it can increase its sales levels to make up for the lost customer and return to its previous production levels. If production levels do not increase, the management of Entity 4 will establish a policy for selling its surplus allowances.
29. During 2015, Entity 4 emitted 4,600 tCO₂e. It did not sell any allowances during 2015. Entity 4 submitted 4,600 allowances to the government on 1 April 2016 and retained the remaining 400 allowances for future use or sale, depending on its future emission levels. Entity 4 is still actively seeking to find new customers and increase its sales (and production) to previous levels.
30. Entity 4 was still operating on 1 January 2016 and received its promised allocation of 4,750 allowances for the 2016 compliance year [5,000 - (5,000 × 20% / 4 years), see paragraph 10].

Entity 5

31. On 1 January 2015, Entity 5 received 5,000 allowances, which are equivalent to 5,000 tCO₂e emissions. This is equal to the amount of emissions that Entity 5 expected to emit during 2015, using its existing production equipment. However, during December 2014, the management of Entity 5 approved plans to install new equipment that utilises more energy efficient technology and is expected to reduce the level of tCO₂e emitted during the production process. This equipment will replace old, less environmentally efficient technology that is currently in use.

32. During January 2015, the new equipment was installed at a cost of CU35,000 and the old equipment was sold for CU7,000, creating a loss on disposal of CU12,000. Despite some problems with efficiency in first three months of use, the new equipment reduced emissions. This resulted in a total of 4,250 tCO₂e being emitted in the year 2015.
33. Entity 5 did not buy or sell any allowances during 2015. It submitted 4,250 allowances received in January 2015 to the government on 1 April 2016, and sold the 2015 surplus in the market on the same day for CU10,500 (750 × CU14).
34. Entity 5 was still operating on 1 January 2016 and received its promised allocation of 4,750 allowances for the 2016 compliance year [5,000 - (5,000 × 20% / 4 years), see paragraph 10].

Appendix C: Example accounting policies using Entity 1 fact pattern

1. To aid discussion of some alternative accounting treatments, we reproduce the illustrative example Entity 1, from the agenda paper used for discussion in the joint CMAC/GPF meeting held on 12 June 2015. This sets out a simplified fact pattern for a participant in a cap-and-trade style emissions trading scheme (ETS). Further details can be found in the background paper presented to the CMAC/GPF (referenced as Agenda Paper 4B for that meeting).

(a)	Entity 1 is a participant in a new cap and trade scheme in which allowances are traded in an active market. The scheme operates for annual compliance periods that coincide with Entity 1's reporting periods. On the first day of the first period, 1 January 2015, Entity 1 receives, free of charge, allowances for the year equivalent to 5,000 tonnes of carbon dioxide equivalents (tCO ₂ e). The market price of the allowances on that day is CU10 ⁴ per tonne, giving a fair value of CU50,000.
(b)	Six months later (at its interim reporting date 30 June 2015) Entity 1 has emitted 2,000 tonnes of carbon dioxide. It expects its emissions for the whole year to be 5,000 tonnes (ie equal to the allowances issued to it). The market price for allowances has risen to CU12 per tonne at 30 June 2015.
(c)	At the year-end, 31 December 2015, Entity 1 measures its emissions for the year at 5,000 tonnes. The market price of allowances at the year-end is CU9 per tonne.
(d)	On 1 April 2016, Entity 1 delivers to the government the 5,000 allowances that it has held since 1 January 2015. The market price of allowances at 31 March and 1 April 2016 is CU14 per tonne.

2. The following paragraphs demonstrate, for six different models, the accounting entries and resulting items in the statements of financial position and profit and loss and other comprehensive income using the same fact pattern throughout. The models are described in the body of this paper.

⁴In this example, monetary amounts are denominated in 'currency units' (CU).

Summary of examples—statement(s) of profit or loss and other comprehensive income effects

	6 months to 30 Jun 2015	6 months to 31 Dec 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
1: IFRIC 3 cost model						
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	20,000
Profit or loss	(4,000)	9,000	5,000	(25,000)	(20,000)	20,000
2: IFRIC 3 revaluation model						
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	0
Remeasurement	0	(5,000)	(5,000)	5,000	0	0
Profit or loss	(4,000)	4,000	0	(20,000)	(20,000)	0
Remeasurement (Other comprehensive income)	10,000	(10,000)	0	20,000	20,000	0
Total income/expense	6,000	(6,000)	0	0	0	0
3: FV through P&L model						
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	0
Remeasurement	10,000	(15,000)	(5,000)	25,000	20,000	0
Profit or loss	6,000	(6,000)	0	0	0	0
4: Modified cost model actual shortfall						
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(20,000)	(30,000)	(50,000)	0	(50,000)	0
Profit or loss	0	0	0	0	0	0
5: Nil cost model actual shortfall						
Government grant	0	0	0	0	0	0
Emissions expense	0	0	0	0	0	0
Profit or loss	0	0	0	0	0	0
6: Recognition of income on receipt of allowances						
Government grant	50,000	0	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	20,000
Profit or loss	26,000	(21,000)	5,000	(25,000)	(20,000)	20,000

Example 1: IFRIC 3 cost model—initial recognition of allowances at fair value, with subsequent measurement using the IAS 38 cost model

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant ⁵	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	20,000
Profit/(loss)	(4,000)	9,000	5,000	(25,000)	(20,000)	20,000

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
Assets	CU	CU	CU	CU	CU
Allowances	50,000	50,000	50,000	50,000	0
Liabilities					
Liability to deliver allowances	0	(24,000)	(45,000)	(70,000)	0
Government grant	(50,000)	(30,000)	0	0	0
	(50,000)	(54,000)	(45,000)	(70,000)	0
Equity	0	(4,000)	5,000	(20,000)	0
Retained earnings	0	(4,000)	5,000	(20,000)	0

Accounting entries

On the first day of the year—1 January 2015

Entity 1 makes the following accounting entry to record receiving the allowances allocated free of charge:

Dr Allowances (intangible asset)	CU50,000	
	Cr Government grant (deferred income)	CU50,000

To recognise the allowances at their fair value (5,000 tonnes at CU10 per tonne).

At the end of the first six months—30 June 2015

Entity 1 makes the following accounting entries in respect of the first six months of the year:

Dr Government grant (deferred income)	CU20,000	
	Cr Income	CU20,000

To recognise as income the portion of the government grant that offsets the cost of emissions in the period (CU50,000 × 2,000/5,000).

⁵ In these examples, Entity 1 has chosen to amortise the deferred income (government grant) using the portion of actual emissions to estimated total emissions.

Dr Emissions expense	CU24,000		
	Cr Liability to deliver allowances		CU24,000

To recognise the increase in the liability for emissions to date (2,000 tonnes measured at CU12 per tonne).

At the end of the year—31 December 2015

Entity 1 makes the following accounting entries in respect of the last six months of the year:

Dr Government grant (deferred income)	CU30,000		
	Cr Income		CU30,000

To recognise as income the remaining portion of the government grant.

Dr Emissions expense	CU21,000		
	Cr Liability to deliver allowances		CU21,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU9 per tonne, less the CU24,000 recognised at the interim reporting date).

At the end of the next 3 months, immediately prior to settling the obligation—31 March 2016

Entity 1 continues to account for the allowances at cost less impairment and to remeasure its liability to deliver allowances until it settles the obligation by delivering allowances to the government. Entity 1 makes the following accounting entries in respect of the first three months of the following year:

Dr Emissions expense	CU25,000		
	Cr Liability to deliver allowances		CU25,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU14 per tonne).

Accounting entries on settling the obligation—1 April 2016

Entity 1 makes the following accounting entries, when it settles the liability for emissions made in the previous reporting year:

Dr Liability to deliver allowances	CU70,000		
	Cr Allowances		CU50,000
	Cr Profit or loss		CU20,000

To recognise the settlement of the obligation by delivering 5,000 allowances.

Example 2: IFRIC 3 revaluation model—initial recognition of allowances at fair value, with subsequent measurement using the IAS 38 revaluation model

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	0
Remeasurement	0	(5,000)	(5,000)	5,000	0	0
Profit/(loss)	(4,000)	4,000	0	(20,000)	(20,000)	0
Other comprehensive income	10,000	(10,000)	0	20,000	20,000	0
Total income/expense	6,000	(6,000)	0	0	0	0

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
	CU	CU	CU	CU	CU
Assets					
Allowances	50,000	60,000	45,000	70,000	0
Liabilities					
Liability to deliver allowances	0	(24,000)	(45,000)	(70,000)	0
Government grant	(50,000)	(30,000)	0	0	0
	(50,000)	(54,000)	(45,000)	(70,000)	0
Equity	0	6,000	0	0	0
Revaluation reserve	0	10,000	0	20,000	0
Retained earnings	0	(4,000)	0	(20,000)	0

Accounting entries

On the first day of the year—1 January 2015

Entity 1 makes the following accounting entry to record receiving the allowances allocated free of charge:

Dr Allowances (intangible asset)	CU50,000	
	Cr Government grant (deferred income)	CU50,000

To recognise the allowances at their fair value (5,000 tonnes at CU10 per tonne).

At the end of the first six months—30 June 2015

Entity 1 makes the following accounting entries in respect of the first six months of the year:

Dr Allowances (intangible asset)	CU10,000	
	Cr Other comprehensive income (revaluation surplus)	CU10,000

To recognise the increase in the fair value of the allowances held (5,000 tonnes whose price has increased from CU10 to CU12 per tonne).

Dr Government grant (deferred income)	CU20,000	
	Cr Income	CU20,000

To recognise as income the portion of the government grant that offsets the cost of emissions in the period (CU50,000 × 2000/5000).

Dr Emissions expense	CU24,000	
	Cr Liability to deliver allowances	CU24,000

To recognise the increase in the liability for emissions to date (2,000 tonnes measured at CU12 per tonne).

At the end of the year—31 December 2015

Entity 1 makes the following accounting entries in respect of the last six months of the year:

Dr Other comprehensive income (revaluation surplus)	CU10,000	
Dr Expense (remeasurement)	CU5,000	
	Cr Allowances (intangible asset)	CU15,000

To recognise the decrease in the fair value of the allowances held (5,000 tonnes whose price has decreased from CU12 to CU9 per tonne). The decrease is recognised in profit or loss, except for the CU10,000 previously recognised in other comprehensive income (see paragraph 86 of IAS 38).

Dr Government grant (deferred income)	CU30,000	
	Cr Income	CU30,000

To recognise as income the remaining portion of the government grant.

Dr Emissions expense	CU21,000	
	Cr Liability to deliver allowances	CU21,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU9 per tonne, less the CU24,000 recognised at the interim reporting date).

At the end of the next 3 months, immediately prior to settling the obligation—31 March 2016

Entity 1 continues to remeasure the allowances at fair value and to remeasure its liability to deliver allowances until it settles the obligation by delivering allowances to the government. Entity 1 makes the following accounting entries in respect of the first three months of the following year:

Dr Allowances (intangible asset)	CU25,000	
	Cr Income (remeasurement)	CU5,000
	Cr Other comprehensive income (revaluation surplus)	CU20,000

To recognise the increase in the fair value of the allowances held (5,000 tonnes whose price has increased from CU9 to CU14 per tonne). The increase is recognised in other

comprehensive income, except for the CU5,000 revaluation decrease previously recognised in profit of loss (see paragraph 85 of IAS 38).

Dr	Emissions expense	CU25,000
	Cr	Liability to deliver allowances
		CU25,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU14 per tonne).

Accounting entries on settling the obligation—1 April 2016

Entity 1 makes the following accounting entries, when it settles the liability for emissions made in the previous reporting year:

Dr	Liability to deliver allowances	CU70,000
	Cr	Allowances
		CU70,000

To recognise the settlement of the obligation by delivering 5,000 allowances.

Dr	Revaluation surplus	CU20,000
	Cr	Retained earnings
		CU20,000

To transfer its revaluation surplus of CU20,000 directly to retained earnings (see paragraph 87 of IAS 38).

Example 3: Previously proposed IASB model—initial recognition of allowances at fair value, with subsequent measurement using a modified IAS 38 revaluation through profit or loss model

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	0
Remeasurement	10,000	(15,000)	(5,000)	25,000	20,000	0
Profit/(loss)	6,000	(6,000)	0	0	0	0

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
	CU	CU	CU	CU	CU
Assets					
Allowances	50,000	60,000	45,000	70,000	0
Liabilities					
Liability to deliver allowances	0	(24,000)	(45,000)	(70,000)	0
Government grant	(50,000)	(30,000)	0	0	0
	(50,000)	(54,000)	(45,000)	(70,000)	0
Equity	0	6,000	0	0	0
Retained earnings	0	6,000	0	0	0

Accounting entries

On the first day of the year—1 January 2015

Entity 1 makes the following accounting entry to record receiving the allowances allocated free of charge:

Dr Allowances (intangible asset)	CU50,000	
	Cr Government grant (deferred income)	CU50,000

To recognise the allowances at their fair value (5,000 tonnes at CU10 per tonne).

At the end of the first six months—30 June 2015

Entity 1 makes the following accounting entries in respect of the first six months of the year:

Dr Allowances (intangible asset)	CU10,000	
	Cr Income (remeasurement)	CU10,000

To recognise the increase in the fair value of the allowances held (5,000 tonnes whose price has increased from CU10 to CU12 per tonne).

Dr	Government grant (deferred income)	CU20,000	
	Cr	Income	CU20,000

To recognise as income the portion of the government grant that offsets the cost of emissions in the period (CU50,000 × 2000/5000).

Dr	Emissions expense	CU24,000	
	Cr	Liability to deliver allowances	CU24,000

To recognise the increase in the liability for emissions to date (2,000 tonnes measured at CU12 per tonne).

At the end of the year—31 December 2015

Entity 1 makes the following accounting entries in respect of the last six months of the year:

Dr	Expense (remeasurement)	CU15,000	
	Cr	Allowances (intangible asset)	CU15,000

To recognise the decrease in the fair value of the allowances held (5,000 tonnes whose price has decreased from CU12 to CU9 per tonne).

Dr	Government grant (deferred income)	CU30,000	
	Cr	Income	CU30,000

To recognise as income the remaining portion of the government grant.

Dr	Emissions expense	CU21,000	
	Cr	Liability to deliver allowances	CU21,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU9 per tonne, less the CU24,000 recognised at the interim reporting date).

At the end of the next 3 months, immediately prior to settling the obligation—31 March 2016

Entity 1 continues to remeasure the allowances at fair value and to remeasure its liability to deliver allowances until it settles the obligation by delivering allowances to the government. Entity 1 makes the following accounting entries in respect of the first three months of the following year:

Dr	Allowances (intangible asset)	CU25,000	
	Cr	Income (remeasurement)	CU25,000

To recognise the increase in the fair value of the allowances held (5,000 tonnes whose price has increased from CU9 to CU14 per tonne).

Dr	Emissions expense	CU25,000	
	Cr	Liability to deliver allowances	CU25,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU14 per tonne).

Accounting entries on settling the obligation—1 April 2016

Entity 1 makes the following accounting entries, when it settles the liability for emissions made in the previous reporting year:

Dr	Liability to deliver allowances	CU70,000	
		Cr	Allowances
			CU70,000

To recognise the settlement of the obligation by delivering 5,000 allowances.

Example 4: Modified IFRIC 3 cost model—initial recognition of allowances at fair value, with subsequent measurement using the IAS 38 cost model and liability for excess emissions to date using carrying amount of allowances

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant	20,000	30,000	50,000	0	50,000	0
Emissions expense	(20,000)	(30,000)	(50,000)	0	(50,000)	0
Profit/(loss)	0	0	0	0	0	0

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
	CU	CU	CU	CU	CU
Assets					
Allowances	50,000	50,000	50,000	50,000	0
Liabilities					
Liability to deliver allowances	0	(20,000)	(50,000)	(50,000)	0
Government grant	(50,000)	(30,000)	0	0	0
	(50,000)	(50,000)	(50,000)	(50,000)	0
Equity	0	0	0	0	0
Revaluation reserve	0	0	0	0	0
Retained earnings	0	0	0	0	0

Accounting entries

On the first day of the year—1 January 2015

Entity 1 makes the following accounting entry to record receiving the allowances allocated free of charge:

Dr Allowances (intangible asset)	CU50,000		
	Cr Government grant (deferred income)		CU50,000

To recognise the allowances at their fair value (5,000 tonnes at CU10 per tonne).

At the end of the first six months—30 June 2015

Entity 1 makes the following accounting entries in respect of the first six months of the year:

Dr Government grant (deferred income)	CU20,000		
	Cr Income		CU20,000

To recognise as income the portion of the government grant that offsets the cost of emissions in the period (CU50,000 × 2,000/5,000).

Dr Emissions expense	CU20,000	
	Cr Liability to deliver allowances	CU20,000

To recognise the increase in the liability for emissions to date (2,000 tonnes measured at CU10 per tonne, ie the same carrying amount per tonne as the allowances held).

At the end of the year—31 December 2015

Entity 1 makes the following accounting entries in respect of the last six months of the year:

Dr Government grant (deferred income)	CU30,000	
	Cr Income	CU30,000

To recognise as income the remaining portion of the government grant.

Dr Emissions expense	CU30,000	
	Cr Liability to deliver allowances	CU30,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU10 per tonne, less the CU20,000 recognised at the interim reporting date, ie the same carrying amount per tonne as the allowances held).

At the end of the next 3 months, immediately prior to settling the obligation—31 March 2016

Entity 1 continues to account for the allowances at cost less impairment and to measure its liability to deliver allowances at the same carrying value as allowances held until it settles the obligation by delivering allowances to the government. Consequently, Entity 1 has no accounting entries in respect of the first three months of the following year.

Accounting entries on settling the obligation—1 April 2016

Entity 1 makes the following accounting entries, when it settles the liability for emissions made in the previous reporting year:

Dr Liability to deliver allowances	CU50,000	
	Cr Allowances	CU50,000

To recognise the settlement of the obligation by delivering 5,000 allowances.

Example 5: Modified cost approach with net position recognised as emissions exceed allowances held

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant	0	0	0	0	0	0
Emissions expense	0	0	0	0	0	0
Profit/(loss)	0	0	0	0	0	0

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
	CU	CU	CU	CU	CU
Assets					
Allowances	0	0	0	0	0
Liabilities					
Liability to deliver allowances	0	0	0	0	0
Government grant	0	0	0	0	0
Equity	0	0	0	0	0
Revaluation reserve	0	0	0	0	0
Retained earnings	0	0	0	0	0

Accounting entries

On the first day of the year—1 January 2015, Entity 1 makes merely a memorandum entry to record receiving the 5,000 allowances allocated free of charge. During 2015, Entity 1 makes memorandum entries to record the volume of emissions actually made. The volume of emissions did not exceed the number of allowances on hand. Consequently, no accounting entries are recorded for the year.

Example 6: Modified cost approach with income recognised on receipt of allowances and net position recognised as emissions are made through the year

Statement(s) of profit or loss and other comprehensive income	6 months to 30 Jun 2015	6 months to 30 Jun 2015	Full year 2015	3 months to 31 Mar 2016	Total for 15 months	On 1 April 2016
	CU	CU	CU	CU	CU	CU
Government grant	50,000	0	50,000	0	50,000	0
Emissions expense	(24,000)	(21,000)	(45,000)	(25,000)	(70,000)	20,000
Profit/(loss)	26,000	(21,000)	5,000	(25,000)	(20,000)	20,000

Statement of financial position	Date of allocation 1 Jan 2015	Interim date 30 Jun 2015	Year-end 31 Dec 2015	3-month Interim date 31 Mar 2016	Settlement on 1 April 2016
Assets	CU	CU	CU	CU	CU
Allowances	50,000	50,000	50,000	50,000	0
Liabilities					
Liability to deliver allowances	0	(24,000)	(45,000)	(70,000)	0
Government grant	0	0	0	0	0
	0	(24,000)	(45,000)	(70,000)	0
Equity	50,000	26,000	5,000	(20,000)	0
Retained earnings	50,000	26,000	5,000	(20,000)	0

Accounting entries

On the first day of the year—1 January 2015

Entity 1 makes the following accounting entry to record receiving the allowances allocated free of charge:

Dr Allowances (intangible asset)	CU50,000	
	Cr Income (government grant)	CU50,000

To recognise the allowances at their fair value (5,000 tonnes at CU10 per tonne).

At the end of the first six months—30 June 2015

Entity 1 makes the following accounting entries in respect of the first six months of the year:

Dr Emissions expense	CU24,000	
	Cr Liability to deliver allowances	CU24,000

To recognise the increase in the liability for emissions to date (2,000 tonnes measured at CU12 per tonne).

At the end of the year—31 December 2015

Entity 1 makes the following accounting entries in respect of the last six months of the year:

Dr Emissions expense	CU21,000	
	Cr Liability to deliver allowances	CU21,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU9 per tonne, less the CU24,000 recognised at the interim reporting date).

At the end of the next 3 months, immediately prior to settling the obligation—31 March 2016

Entity 1 continues to account for the allowances at cost less impairment and to remeasure its liability to deliver allowances until it settles the obligation by delivering allowances to the government. Entity 1 makes the following accounting entries in respect of the first three months of the following year:

Dr Emissions expense	CU25,000	
	Cr Liability to deliver allowances	CU25,000

To recognise the increase in the liability for emissions to date (5,000 tonnes measured at CU14 per tonne).

Accounting entries on settling the obligation—1 April 2016

Entity 1 makes the following accounting entries, when it settles the liability for emissions made in the previous reporting year:

Dr Liability to deliver allowances	CU70,000	
	Cr Allowances	CU50,000
	Cr Profit or loss	CU20,000

To recognise the settlement of the obligation by delivering 5,000 allowances.