Staff Paper

Project	**Emissions Trading Schemes**
Topic	**Summary of proposed models**

Purpose

1. The purpose of this paper is to provide a summary of the financial statement effect of the views expressed in IASB Agenda Paper 7A/FASB Agenda Paper 8A and IASB Agenda Paper 7B/FASB Agenda Paper 8B. These views are applicable for a cap and trade emissions trading scheme.

2. Appendix A summarises these views to outline the effect on the measurement of purchased and allocated allowances, recognition of the liability for excess emissions, and measurement of liabilities[1] for the scheme. These models are not meant to pre-empt any of the boards' tentative decisions, but rather provide an outline of how the staff believe these models would work. The summary illustrates the financial statement effect for entities that may be over or under emitters.

[1] The liabilities include the liability for the allocation and the liability for excess emissions.

3. The analysis supporting the summary is included in the emissions trading schemes agenda papers that will be discussed at the November joint board meeting. This paper is not meant to replace that analysis, only to supplement it by providing a 'snapshot' that may be useful in the discussions. The agenda papers for the November board meeting are as follows:

- Agenda Paper 7A/8A: **Recognition of a liability for emissions in excess of initial allocation, and measurement of liabilities in an emission trading scheme**
- Agenda Paper 7B/8B: **Initial and subsequent measurement of purchased allowances (assets) (cap and trade scheme)**
- Agenda Paper 7C/8C: **Balance sheet presentation of the assets and liabilities in an emission trading scheme** (not summarised in this memo)

Description of the Views

4. The columns in Appendix A present the views in IASB Agenda Paper 7A/FASB Agenda Paper 8A for the recognition of the liability for excess emissions and measurement of the quantity input of liabilities for the scheme. Those views are summarised as follows:

(a) View 1: An entity is obligated to submit allowances for the entire scheme and thus must initially measure the liability based upon the quantity of its total expected emissions for the compliance period that those allocated allowances relate.

(b) View 2: An entity is obligated to return ***only*** the allocated allowances, (ie a maximum) and thus the liability for the allocation is capped at the quantity of allocated allowances. If the entity expects to emit more than the liability for the allocation for the compliance period (ie over emitter), a liability for excess emissions is recognised as the entity emits throughout the compliance period[2].

(c) View 3: An entity is obligated to return ***only*** the allocated allowances, (ie a maximum) and thus the liability for the allocation is capped at the quantity of allocated allowances. A liability for excess emissions is recognised when actual emissions exceed the liability for the allocation.

5. The rows in Appendix A present the balance sheet net position, the effect on earnings, and earnings volatility. These rows are presented separately for over and under emitters, and for the views in IASB Agenda Paper 7B/FASB Agenda Paper 8B for the initial and subsequent measurement of purchased and allocated[3] allowances. Those views are as follows:

(a) Model 1 – Fair value at initial and subsequent measurement

(b) Model 2 – Intended use approach

Next Step

6. The agenda papers listed above include a number of questions for the boards on key issues for the emissions trading schemes project. The staff believe that tentative decisions on these key issues, when combined with prior board decisions, will result in a proposed accounting model for cap and trade schemes. The staff plan to use this proposed model to perform outreach activities, that will provide feedback from constituents, including users, preparers, auditors, and regulators. The staff plan to bring this feedback back to the boards at a future meeting.

[2] The recognition of this liability is based upon a pro rata calculation that takes into account the quantity of allowances allocated and an entity's actual emissions. This calculation is explained in paragraphs 27-38 of Agenda Paper 7A/8A.

[3] The staff recommend in Agenda Paper 7B/8B that purchased and allocated allowances are measured in the same way.

Appendix A

	View 1 of Excess Liability (As presented in AP 7A/8A)	View 2 of Excess Liability (As presented in AP 7A/8A)	View 3 of Excess Liability (As presented in AP 7A/8A)
Over Emitter[4]			
Net Position	Uncovered liability at the beginning of the year, until an entity purchases allowances to cover that liability. Net nil position if an entity purchases allowances at the beginning of the compliance period[5] to cover the liability. Net position will change, if an entity purchases more allowances than needed, or if an entity does not maintain enough allowances to cover the liability.	Surplus assets when an entity purchases allowances at the beginning or throughout the compliance period to cover future expected emissions liabilities that have not yet been recognised. Entity will be short of allowances as the liability for excess emissions is recognised throughout the compliance period, unless the entity purchases allowances equal to that liability.	Surplus assets when an entity purchases allowances at the beginning or throughout the period to cover future expected emissions liabilities that have not yet been recognised. Entity will be short of allowances when the liability for excess emissions is recognised (ie when actual emissions exceed the initial allocation of allowances) unless the entity purchases allowances equal to that liability.
Earnings	Expense for excess emissions will be recognised when an entity receives an allocation of allowances (ie Day 1).	Expense for excess emissions is recognised throughout the compliance period (as an entity emits).	Expense for excess emissions recognised when emissions exceeds the initial allocation of allowances (which may be late in the period).

[4] Over emitter position assumes the entity does not sell any of its allocated allowances. This assumption is used for entire table.

[5] The staff have assumed that the liabilities in View 1 and in View 2 would be measured based upon the compliance period to which the allocation of allowances relates. This is explained in Agenda Paper 7A/8A. The term compliance period is used throughout this table.

	View 1 of Excess Liability **(As presented in AP 7A/8A)**	**View 2 of Excess Liability** **(As presented in AP 7A/8A)**	**View 3 of Excess Liability** **(As presented in AP 7A/8A)**
Over Emitter[4]			
Purchased and allocated allowances measured at ***Fair Value w/Remeasurement*** **(Model 1 as presented in AP 7B/8B)**			
Earnings Volatility (Assets)	No volatility through earnings when an entity's allowances equal the liability for all emissions. Volatility will be experienced if an entity purchases *extra* allowances (ie above what is necessary to cover the liability).	Volatility in earnings in subsequent periods for price changes in allowances purchased above recognised liabilities.	Volatility through earnings in subsequent periods for price changes in allowances purchased above recognised liabilities.
Earnings Volatility (Liabilities)	Volatility for any uncovered portion of the liability.	Volatility for any uncovered portion of the liability for excess emissions (which is accrued throughout the year).	Volatility for the uncovered portion of the liability for excess emissions (which is recognised when actual emissions exceeds the initial allocation of allowances, which may be late in the period).

	View 1 of Excess Liability **(As presented in AP 7A/8A)**	**View 2 of Excess Liability** **(As presented in AP 7A/8A)**	**View 3 of Excess Liability** **(As presented in AP 7A/8A)**
Over Emitter[4]			
Purchased and allocated allowances measured using ***Intended Use*** **(Model 2 as presented in AP 7B/8B)**			
Earnings Volatility (Assets)	No volatility through earnings when an entity's allowances are classified as 'held for use' equal to the liability for all emissions. Volatility for allowances classified as 'trading'.	No volatility for allowances classified as 'held for use' as there is no remeasurement. Volatility for allowances classified as 'trading'.	No volatility for allowances classified as 'held for use' as there is no remeasurement. Volatility for allowances classified as 'trading'.
Earnings Volatility (Liabilities)	Volatility for any uncovered portion of the liability.	Volatility for any uncovered portion of the liability for excess emissions (which is accrued throughout the year).	Volatility for the uncovered portion of the liability for excess emissions (which is recognised when actual emissions exceeds the initial allocation of allowances, which may be late in the period).

	View 1 of Excess Liability (As presented in AP 7A/8A)	View 2 of Excess Liability (As presented in AP 7A/8A)	View 3 of Excess Liability (As presented in AP 7A/8A)
Under Emitter[6]			
Net Position	An under emitter will not recognise an excess liability and thus will not be affected by the views for the recognition of the excess liability. An under emitter may have surplus assets if the expected return approach measures the liability for the allocation at an amount less than the allocated allowances.	An under emitter will not recognise an excess liability and thus will not be affected by the views for the recognition of the excess liability. An under emitter may have surplus assets if the expected return approach measures the liability for the allocation at an amount less than the allocated allowances.	An under emitter will not recognise an excess liability and thus will not be affected by the views for the recognition of the excess liability. An under emitter may have surplus assets if the derecognition approach[7] enables the entity to derecognise a portion of the liability for the allocation at an amount less than the allocated allowances.

[6] Under emitter assumes the entity's expectation is that actual emissions will be less than the initial allocation of allowances.
[7] The derecognition approach is described in Appendix A of Agenda Paper 7A/8A. The derecognition approach requires an entity to conclude that it is *virtually certain* or *more likely than not* that it will not be required to return those allocated allowances.

	View 1 of Excess Liability (As presented in AP 7A/8A)	View 2 of Excess Liability (As presented in AP 7A/8A)	View 3 of Excess Liability (As presented in AP 7A/8A)
Under Emitter[6]			
Earnings	Gain for allocated allowances received may be recognised for an under emitter that will not be required to submit these allowances based upon an expected return approach. (This gain may be recognised as early as Day 1.)	Gain for allocated allowances received may be recognised for an under emitter that will not be required to submit these allowances based upon an expected return approach. (This gain may be recognised as early as Day 1.)	Gain for allocated allowances received may be recognised for an under emitter that concludes that it is *Virtually Certain* or *More Likely Than Not* that it will not be required to submit these allowances. (This gain may be recognised as early as Day 1[8].)
Allocated allowances[9] measured at *Fair Value w/Remeasurement* (Model 1 as presented in AP 7B/8B)			
Earnings Volatility (Assets)	Volatility for surplus allowances held.	Volatility for surplus allowances held.	Volatility for surplus allowances held.
Earnings Volatility (Liabilities)	Volatility for any uncovered portion of the liability for the allocation.	Volatility for any uncovered portion of the liability for the allocation.	Volatility for any uncovered portion of the liability for the allocation.

[8] It is possible for Day 1 gain in this view, however, the staff believe this is remote because this view uses the derecognition approach for the measurement of the liability for the allocation and thus there is a higher threshold for the derecognition of the liability for the allocation.
[9] Since this entity is an under emitter, the staff have assumed that the entity does not purchase allowances.

	View 1 of Excess Liability (As presented in AP 7A/8A)	View 2 of Excess Liability (As presented in AP 7A/8A)	View 3 of Excess Liability (As presented in AP 7A/8A)
Under Emitter[6]			
Allocated allowances measured using *Intended Use* (Model 2 as presented in AP 7B/8B)			
Earnings Volatility (Assets)	No volatility for allowances classified as ‘held for use’ as there is no remeasurement. Volatility for allowances classified as ‘trading’.	No volatility for allowances classified as ‘held for use’ as there is no remeasurement. Volatility for allowances classified as ‘trading’.	No volatility for allowances classified as ‘held for use’ as there is no remeasurement. Volatility for allowances classified as ‘trading’.
Earnings Volatility (Liabilities)	Volatility for any uncovered portion of the liability for the allocation.	Volatility for any uncovered portion of the liability for the allocation.	Volatility for any uncovered portion of the liability for the allocation.