

International Financial Reporting Standards

IASB meeting,
October 2015
Agenda Paper 6A

Pollutant Pricing Mechanisms Emissions Trading Schemes issues

The views expressed in this presentation are those of the presenter, not necessarily those of the IASB or IFRS Foundation.

Purpose of this session

- The purpose of this presentation is to highlight accounting issues and interactions between them that will need to be considered in developing an accounting model for cap-and-trade type emissions trading schemes (ETS).
- This is an education session.
- In future meetings, the staff will ask IASB members to make decisions about the issues highlighted.

Project background

- **Previous project**
(2005-2010)

- Began after the issue (2004) and withdrawal (2005) of IFRIC 3 *Emission Rights*
- IASB made some tentative decisions about cap-and-trade emissions trading scheme (ETS) issues

January 2015—IASB decided to take a fresh start approach

- **Current research project**

- there is diversity in accounting methods used in financial statements
- current focus on cap-and-trade ETS
- scope to cover other types of pollutant pricing mechanisms
- scope will focus on participants (emitters and captors)
- accounting by government/ scheme administrators is focus of project by the International Public Sector Accounting Standards Board (IPSASB).

Discussion Paper expected in H1 2016

- **Pollutant pricing mechanisms:** price- or market-based approaches used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants. The price can be set directly (eg through a tax) or indirectly through a market.
- **Cap-and-trade emissions trading scheme (ETS):** a type of ETS in which the government sets an overall 'cap' on the volume of specified pollutants and uses tradeable 'allowances' (sometimes called certificates, rights or credits) of equal quantity to establish the price.
- **Participants/ emitters:** entities that emit the specified pollutants that are subject to an ETS and have an obligation to remit allowances to the government.
- **Traders:** entities that buy and sell emissions allowances but are not participants in the scheme.
- **Commitment period:** the period over which the cap has been established.
- **Compliance year:** a year within the commitment period, for which the participant must verify its emissions and remit allowances.

Cap-and-trade type of ETS

Common features of cap-and-trade emissions trading schemes

| | |
|---------------------------------------|---|
| Overall cap (emissions target) | Total units of emissions (eg tonnes of CO ₂) that may be released by all participants (emitters) within the commitment period over which emissions are to be reduced |
| Implementation of overall cap | Allocation or auction or sale of allowances to individual emitters up to overall cap. Typically issued in reducing instalments in each compliance year within the commitment period |
| Trading mechanism | Allowances are tradable. Allocations given only to participants, but trade may be with other participants or with non-participant traders |
| 'Emissions obligation' | Obligation to remit allowances covering emissions made by a participant during the compliance year |

Economic drivers (1)

- Government targets a gradual reduction of overall pollutant emissions below a 'benchmark' level
 - the target each year is set as a 'cap' for allowances to be issued by the government
- The emissions obligation can only be settled using allowances
 - Fines/ penalties imposed for late settlement do not eliminate the obligation to remit allowances to cover emissions made
- In the first commitment period of many schemes, the issue and return of allowances is designed to be '**cash neutral**' for the government:
 - Number of allowances issued **for nil consideration** equals the number of allowances to be returned

Looking at the scheme as a whole, there is no government grant element and no tax element.

Economic drivers (2)

- Allowances only have value in the market if there are buyers willing to buy and sellers willing to sell
- If all participants emit fewer pollutants than the allowances they have been allocated, the market value of the allowances will be zero
- Allocation to individual participants for nil consideration is based on a variety of factors, including:
 - ability of participants to switch to ‘greener’ production methods
 - ability of participants to relocate/ curtail production
 - ability of participants to pass on costs to the users of the goods/ services that give rise to the pollutants
- Allocation policies can encourage market liquidity

Economic drivers (3)

- Effectiveness of the scheme relies on participants taking different actions and creating liquidity in the market
- Allocation policies and market forces influence how individual participants react:
 - invest in changes to the production process in order to reduce emissions
 - retain existing production process and purchase allowances
 - relocate or substantially curtail/ cease production
- Gains can be made by participants who emit below the level of their allocation and sell surplus allowances

Economic drivers (4)

What financial effects does a cap-and-trade ETS create for a participant in the scheme?

A requirement to remit allowances as a result of emitting

Participants are allocated allowances that need to be returned if they emit

An opportunity to benefit from surplus allowances

A cost for excess emissions

What is the nature of the allocation: a grant? or loan? or something else?

What are the main accounting issues? (1)

10

- What **elements** should an entity recognise in its financial statements for emissions trading schemes?
 - What are the obligations/**liabilities** in the scheme – when do they arise?
 - Allowances—are they **assets**?
 - If so, what type of asset? (intangible, financial, inventory, other)
 - Should the assets/liabilities be **recognised**? If so, **when**?
 - How do you **measure** the assets and liabilities?
 - What **income/expenses** arise and **when** do you recognise **gains/losses**?

What are the main accounting issues? (2)

- How should the elements recognised be **presented**?
 - Should the **assets** and **liabilities** be presented gross in the statement of financial position?
 - Can or should they be offset or netted?
 - Could they be presented through a linked form of presentation?
 - How should **income/ expenses** and **gains/ losses** be presented?
 - Can or should they be offset or netted?
 - Could they be presented through a linked form of presentation?
- What **disclosures** are needed?

Proposed definitions

Assets

Present economic resources controlled by the entity as a result of past events

Liabilities

Present obligations of the entity to transfer an economic resource as a result of past events

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

- A **present obligation** is an obligation to transfer economic resources that:
 - a) the entity has no practical ability to avoid; and
 - b) has arisen from a past event (ie economic benefits already received or activities already conducted).

- **Emissions obligation:**

- Participant entity has an obligation to remit allowances to cover pollutants emitted in the period

A present obligation is an obligation to transfer economic resources that:

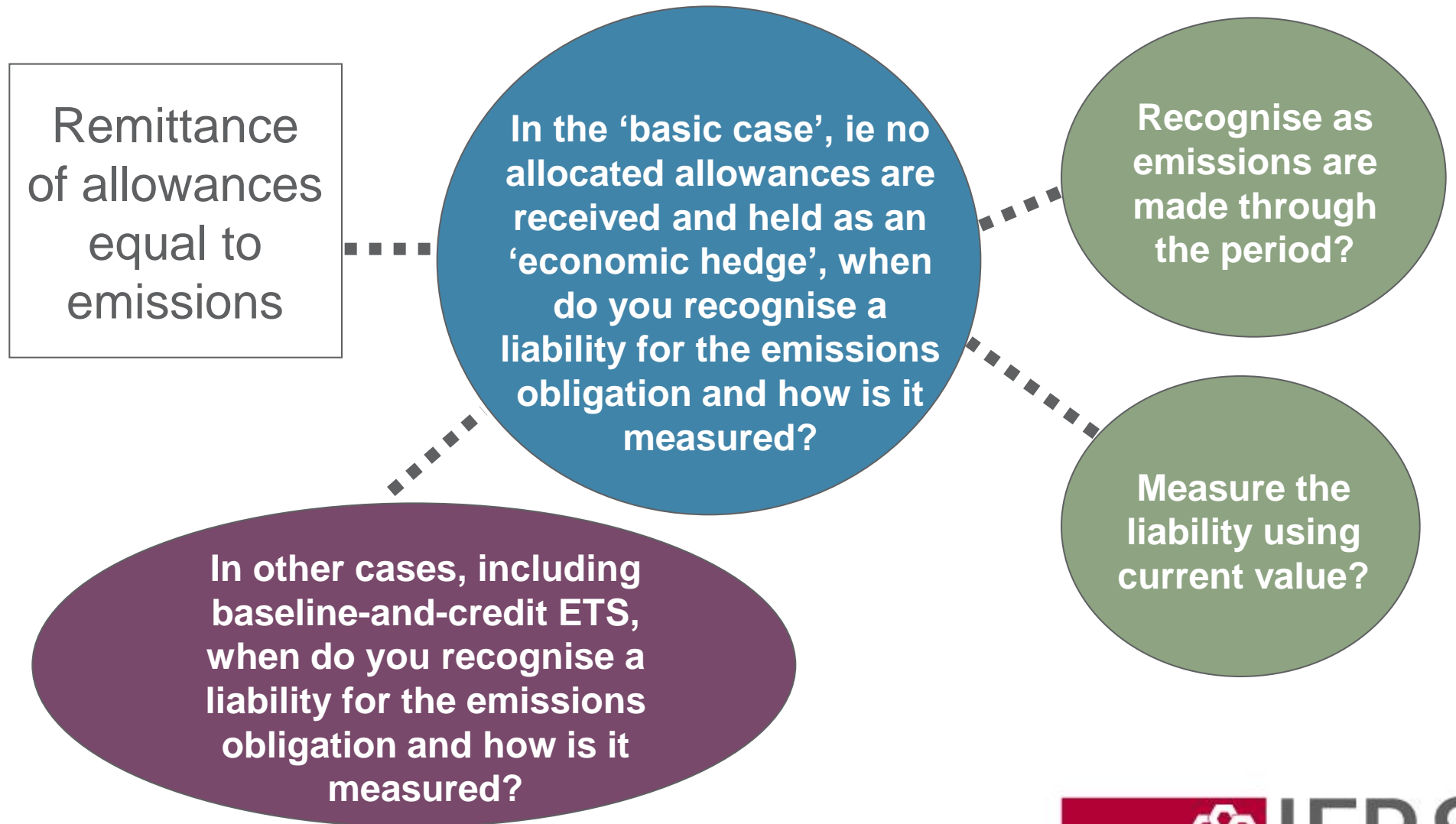
a) the entity has no practical ability to avoid;

AND

b) has arisen from a past event (ie economic benefits already received or activities already conducted).

A participant in the scheme is going to have no practical ability to avoid emitting pollutants during the compliance period, without ceasing its production.

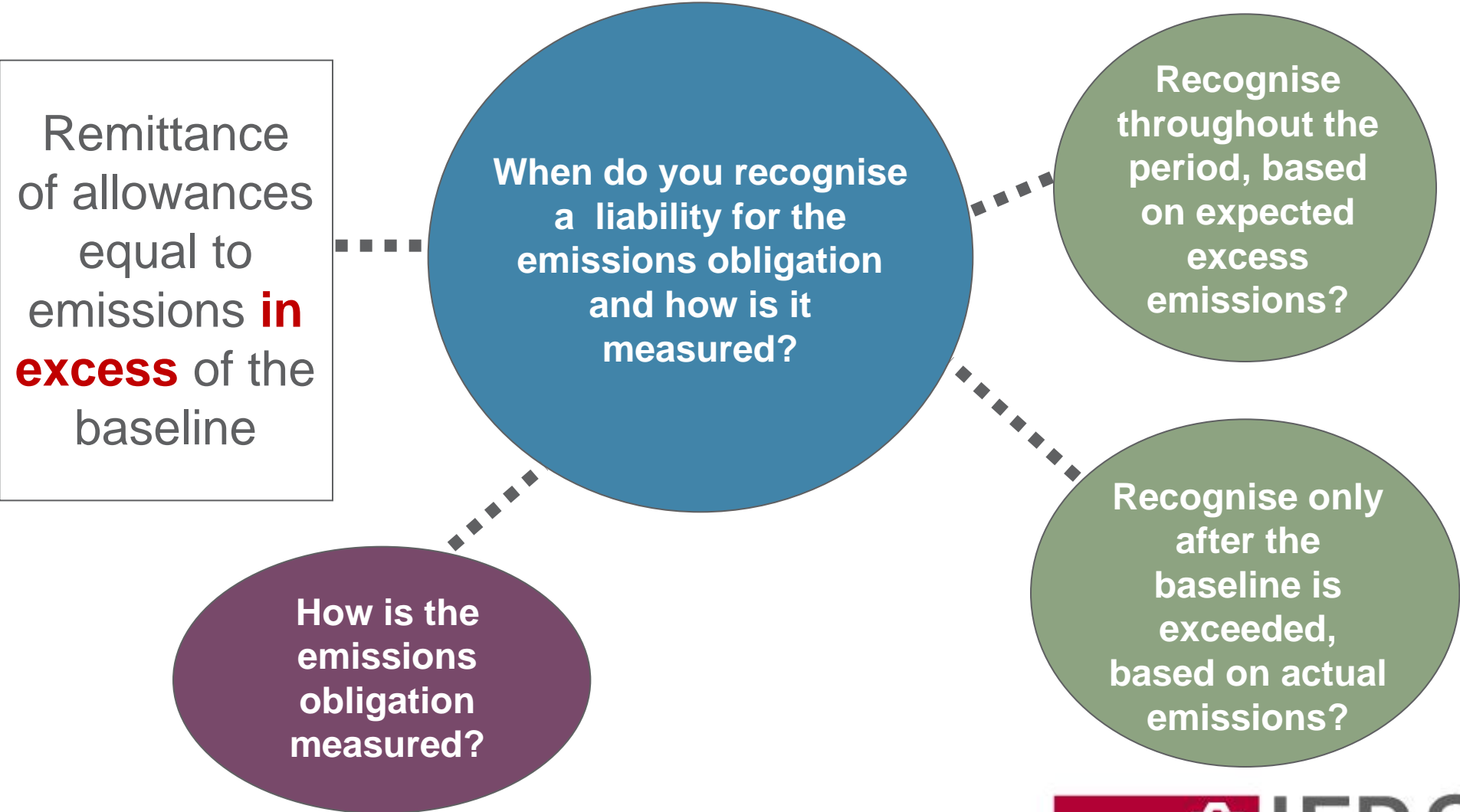
The emissions obligation arises as a result of the entity emitting the specified pollutants in the compliance period.



Cap-and-trade vs Baseline-and-credit type of ETS

| | Cap & trade | Baseline & credit |
|---------------------------------------|--|---|
| Overall cap (emissions target) | Total units of emissions (eg tonnes of CO ₂) that may be released by all emitters within the commitment period | |
| Implementation of overall cap | Allocation or sale of allowances to individual emitters, up to the overall cap | Baselines are assigned to individual emitters, up to the overall cap Credits (allowances) issued only if emissions are below the baseline at end of the year |
| Trading mechanism | Allowances are tradable | Credits (allowances) are tradable, baseline is not |
| Allowances to be remitted | Allowances covering total emissions | Credits (allowances) covering emissions in excess of baseline |

- **Emissions obligation:**
 - Entity has an obligation to remit allowances equivalent to the volume of pollutants emitted in the period **that are in excess of the baseline**
- Like in the cap-and-trade ETS, some participants in the scheme are going to have no practical ability to avoid emitting pollutants **in excess of the baseline** during the compliance period, without changing production processes or significantly curtailing production.
- The emissions obligation arises as a result of the entity emitting the specified pollutants in the compliance period.



Baseline-and-credit ETS—example

18

Compliance year ended 31 December 20X0

Baseline for the year is set at 120 units of pollutant emissions.

Entity A expects to (and does) emit 144 units, spread evenly through the year.

The market price of credits (allowances) is CU 10 per unit throughout the year.

Total cost to Entity A is CU 240—the 24 excess emissions units costing CU 10 per unit.

When is the emissions obligation and the cost of the excess recognised?



Months 1-10=no accounting entries
Months 11-12=
Dr Expense CU 120
Cr Emissions liability CU 120

Total expense=CU240

Months 1-12=
Dr Expense CU 20
Cr Emissions liability CU 20

Total expense=CU 240

Proposed definitions

Assets

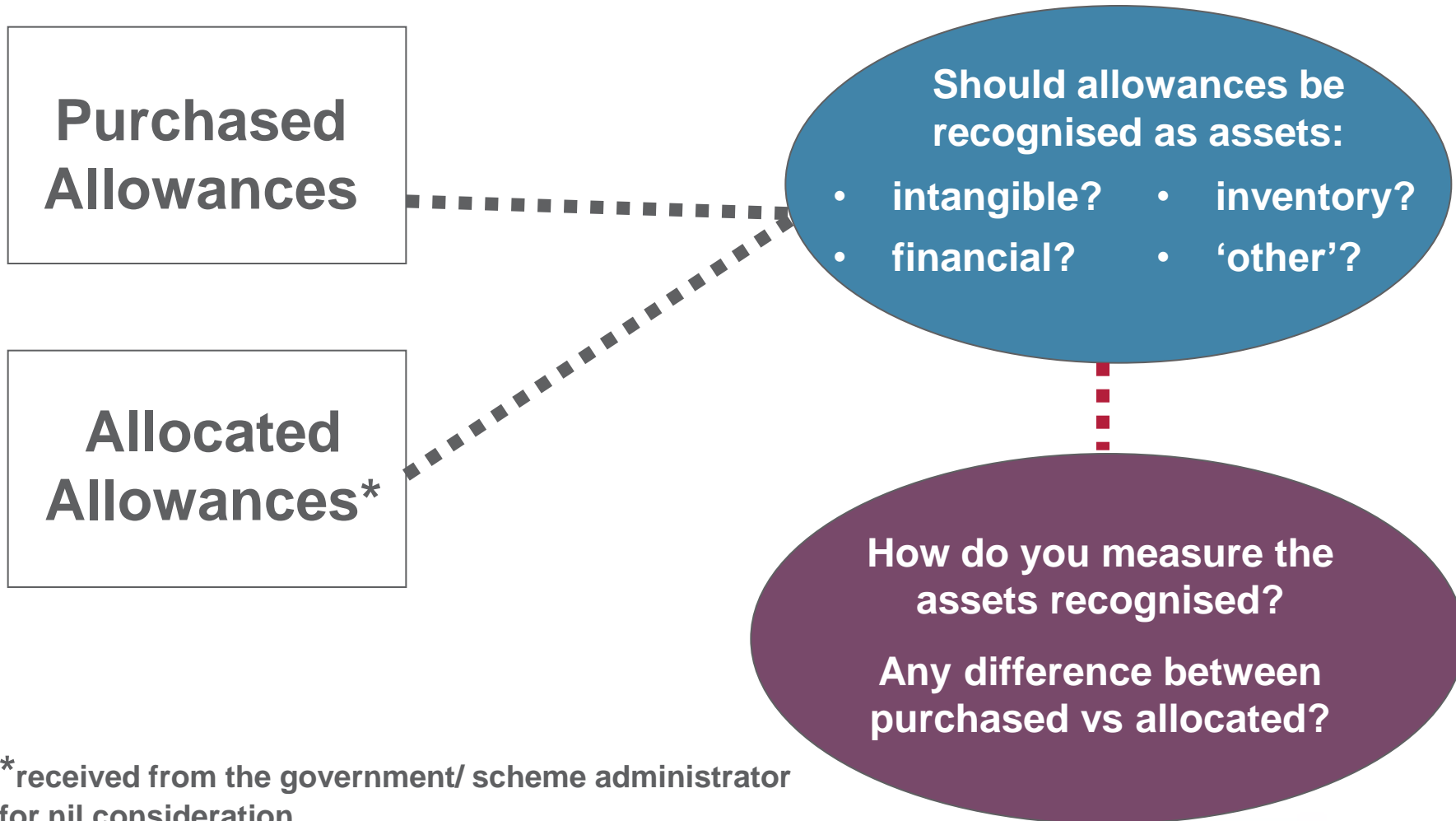
Present economic resources controlled by the entity as a result of past events

Liabilities

Present obligations of the entity to transfer an economic resource as a result of past events

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

- An **economic resource** is a right that has the potential to produce economic benefits.
- The **allowances** in a cap-and-trade ETS are tradeable instruments that:
 - have market value
 - can be sold or used to settle the remittance obligation
 - are allocated for nil consideration or are purchased



*received from the government/ scheme administrator for nil consideration

Alternative 1: Measure the allowances initially and subsequently at fair value

Alternative 2: Measure the allowances initially at fair value **or cost**, no remeasurement

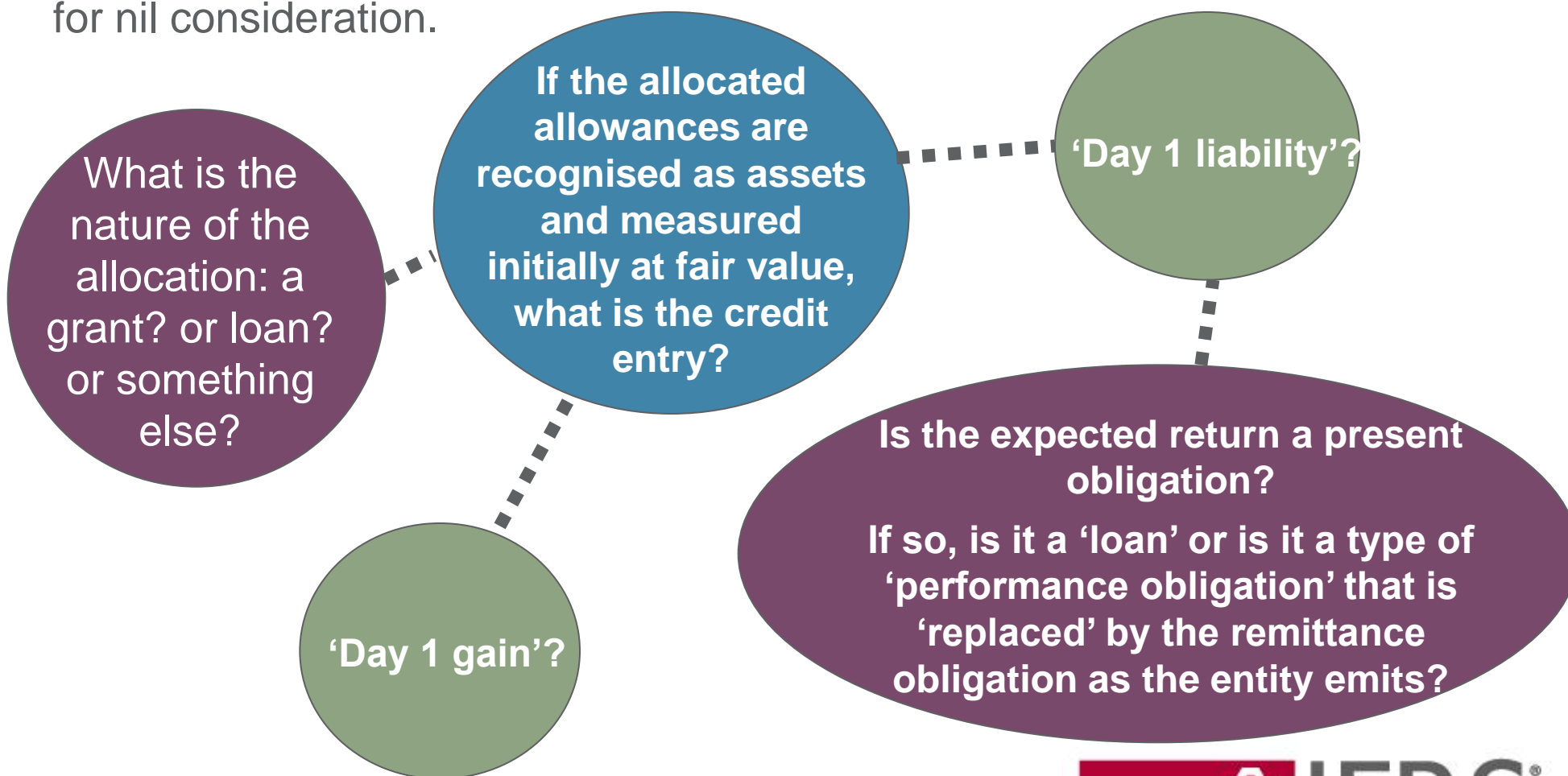
Alternative 3: Measure the assets based upon their *‘intended use’*

- a) *held for use:* measure assets initially at fair value **or cost**, no remeasurement
- b) *trading:* measure assets initially and subsequently at fair value

Cap-and-trade ETS—nature of the liability (2)

22

- A participant in the scheme may receive allowances from the government for nil consideration.



Cap-and-trade ETS—example: day 1

Compliance year ended 31 December 20X0

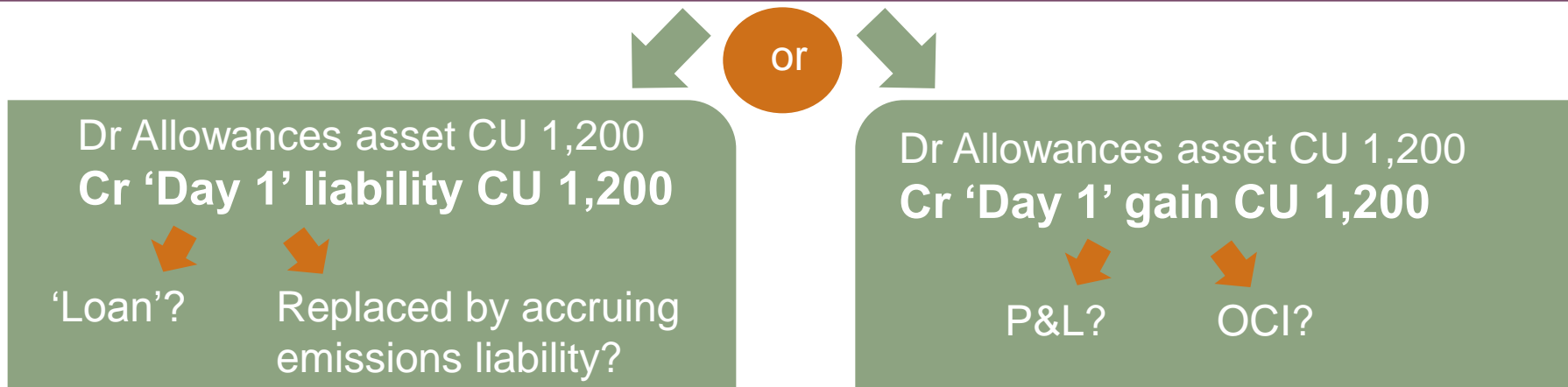
Entity A receives 120 allowances for nil consideration on 1 January 20X0.

Entity A expects to (and does) emit 144 units, spread evenly through the year.

The market price of allowances is CU 10 per unit throughout the year.

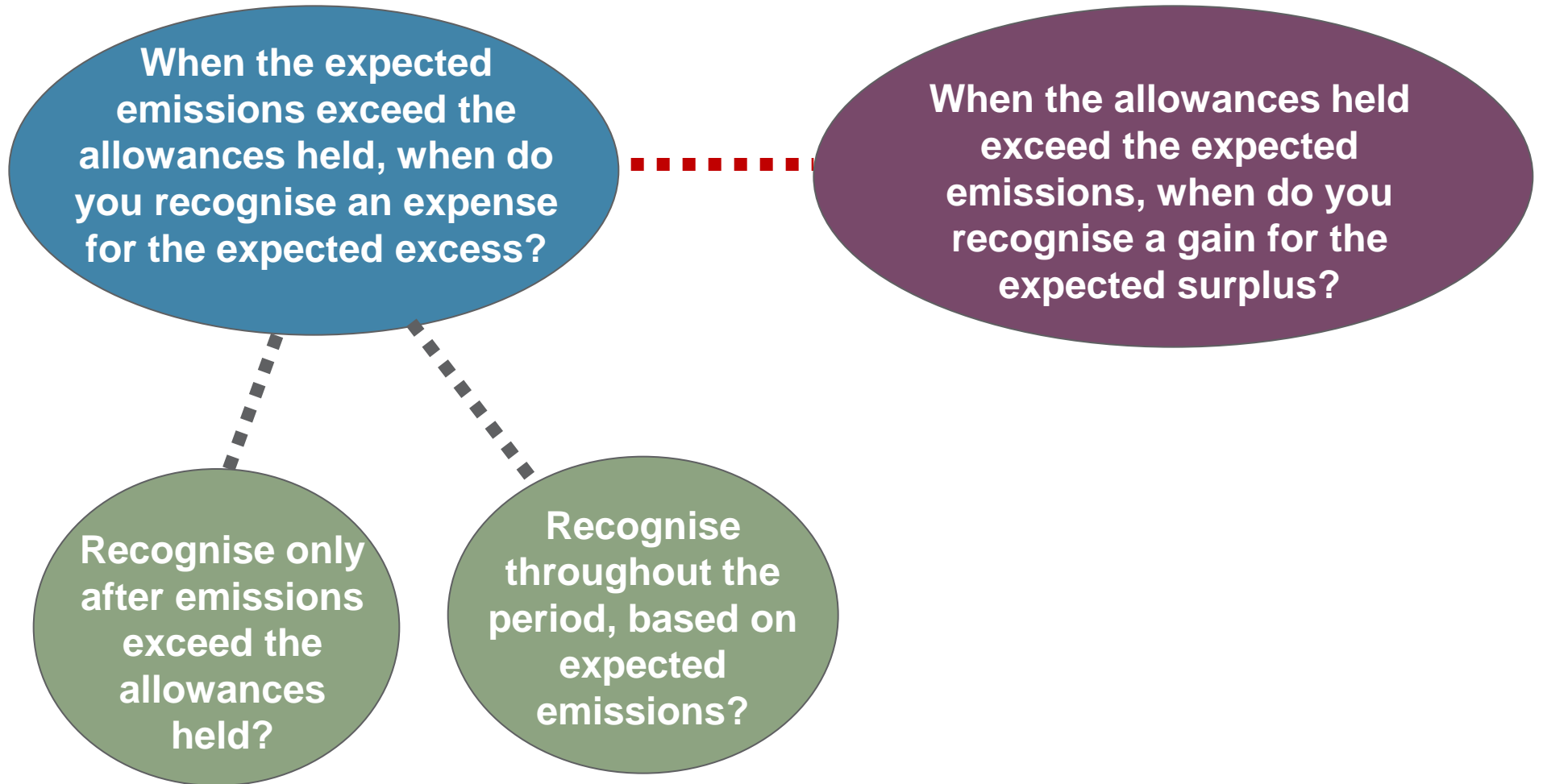
Total cost to Entity A is CU 240—24 excess emissions units costing CU 10 per unit.

If the allowances are recognised and measured initially at fair value, what is the credit entry?



What effect in P&L account?

Cap-and-trade ETS—gain/ expense recognition



Cap-and-trade ETS—example

25

Compliance year ended 31 December 20X0

Entity A receives 120 allowances for nil consideration on 1 January 20X0.

Entity A expects to (and does) emit 144 units, spread evenly through the year.

The market price of allowances is CU 10 per unit throughout the year.

Total cost to Entity A is CU 240—the 24 excess emissions units costing CU 10 per unit.

When is the emissions obligation and the cost of the excess recognised?



Months 1-10=no accounting entries
Months 11-12=
Dr Expense CU 120
Cr Emissions liability CU 120

Total expense=CU240



Months 1-12=
Dr Expense CU 20
Cr Emissions liability CU 20

Total expense=CU 240

Does the Day 1 balance remain at CU 1,200 or reduce over 10 or 12 months?

Cap-and-trade (and Baseline-and-credit) ETS— measuring the emissions liability

26

Alternative 1: Measure the liability at current value, ie the market price of the number of allowances needed to settle the obligation

Alternative 2: Measure the liability at the carrying amount of allowances on hand (cost or fair value), with any quantity in excess of allowances held being measured at current value

Comments or questions

