

An aerial photograph showing a two-lane asphalt road that curves from the left towards the right. The road is bordered by a dense line of green trees and shrubs. To the left of the road is a body of water with a greenish tint, and to the right is a darker blue body of water. A small red car is visible on the road, moving away from the viewer. The overall scene is serene and natural.

Carbon-related instruments – considerations for accounting treatments.

Methodology and acknowledgements.

The methodology for this research is summarised in the first article, [Carbon-related instruments – companies’ perspectives and relevant implications](#), along with acknowledgement of contributions from individuals who provided us with invaluable insights, which enabled the writing of this series of articles and the accompanying examples.

We acknowledge and thank the authors of the research report [Reality of Accounting for Carbon-related Instruments](#) (Baboukardos et al. 2025), who provided feedback on this article. In addition, we acknowledge and thank all these individuals who provided feedback to enhance the usefulness of this article.

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2.1 Introduction

‘Do not look at carbon credits in isolation. The accounting for carbon credits should reflect how the instruments are used in the company’s business and risk-management strategy.’

A finance professional

For the purpose of this article, instruments that represent a price on carbon emissions within a carbon market (whether a compliance or voluntary market) are collectively described as ‘carbon-related instruments’. Our research found a variety of accounting treatments being applied to carbon-related instruments in the absence of an IFRS Accounting Standard that specifically applies to these instruments (Baboukardo et al.2025).

In this article, we explore the considerations for accounting and reporting of carbon-related instruments and provide several recommendations to help everyone understand the nature, function and financial effects of engaging with these instruments. Anonymised anecdotes and examples that have been edited for conciseness and clarity are used to illustrate these considerations.

Our first article, [Carbon-related instruments – companies’ perspectives and relevant implications](#), explores the perspectives of companies that engage with carbon-related instruments and the implications of engaging with these instruments for the company, its employees and customers (Saw 2025).

These articles draw insights from research by ACCA and the Adam Smith Business School of University of Glasgow, which produced the research report, [Reality of Accounting for Carbon-related Instruments](#) (Baboukardos et al. 2025), online polls in October 2024, and roundtables and interviews conducted in November 2024. Throughout these articles, ‘our research’ refers to these activities, collectively. See [Methodology and Acknowledgements](#).

2.1.1 Scope and disclaimer

This article explores a suggested workflow and the considerations for accounting treatments by companies that acquire carbon-related instruments to meet their own expected use. These treatments are based on existing IFRS Accounting Standards. This article does not consider the accounting treatments by companies that generate carbon-related instruments or engage with carbon-related instruments for other purposes, such as trading or hedging. The workflow and considerations in this article are not exhaustive: they do not cover all possible accounting treatments.

This article is not a substitute for reading the IFRS Accounting Standards, the Conceptual Framework for Financial Reporting (Conceptual Framework) or other guidance issued by the International Accounting Standards Board (IASB) (see the [IFRS Accounting Standards Navigator](#) (IFRS 2025)). While all reasonable care and skill has been used to produce this article, any commentary provided is general guidance only and does not constitute professional advice.

2.2 Implications of reporting of carbon-related instruments without a dedicated accounting standard

Engagement with carbon-related instruments may affect several line items in the financial statements. The variety of accounting treatments observed across companies (see Table 2.1) could be a reflection of the different nature, function (or contractual features) and intended use of the carbon-related instruments. See section 4.4.1 of the research report (Baboukardos et al. 2025) for details.

The absence of an IFRS Accounting Standard or guidance issued by the IASB dedicated to the accounting and reporting of carbon-related instruments causes:

- companies to develop their own accounting policies based on current IFRS Accounting Standards to account for these instruments as either assets, liabilities, income or expenses, which leads to diverse accounting treatments in practice
- companies to use their own discretion in determining the information to provide about carbon-related instruments
- auditors to spend more effort auditing financial statements that include these instruments
- users to need to be more diligent in understanding the accounting treatments applied by different companies.

Consequently, it's difficult to tell whether two or more companies have applied a consistent accounting treatment for the same instrument, even when the circumstances are alike.

Table 2.1: Recognition and measurement of carbon-related instruments in the financial statements of 121 companies

		MEASURED AT		
RECOGNISED AS	TOTAL	FAIR VALUE	HISTORICAL COST	UNSPECIFIED
<i>Assets</i>				
Intangible assets	54	4	44	6
Inventories	35	14	14	7
Financial assets	28	15	2	11
Other assets	20	3	9	8
<i>Liabilities</i>				
Provisions	79	43	12	24
Deferred income / government grant	13	1	1	11

Source: Baboukardos et al. 2025: 24

‘For now, we need guidance for scoping and defining carbon credits and other carbon-related instruments: ie there’s guidance when the instrument is determined to be inventories or intangible assets, but until then a company is on its own. Several accounting standards need to be reviewed and updated to account for and report on carbon credits – ie amend the recognition, measurement and disclosure requirements.’

‘We need guidance for producers and users of carbon credits. Diverse accounting practices may rightly reflect the different ways that companies are using carbon credits. My company generates carbon credits for its own use and doesn’t treat these credits as inventories because they are not for sale. Another company that generates carbon credits for sale may apply a different accounting treatment.’

- ‘Some complex transactions definitely need guidance. For example, accounting for:**
- **pre-purchased carbon credits (or often referred to as forward credits) – where the price is fixed for a specified number of carbon credits to be delivered in the future. The purchaser either pays in full or partially. The carbon credits are generated from carbon reduction/ removal activities that will only happen in the future, and this may be between 10 and 30 years later**
 - **investment in a project that generates carbon credits – either nature-based or technology-based – where the investor becomes entitled to a part of or all the credits generated.’**

A synthesis of comments from roundtable participants

Users of financial statements would benefit from consistent accounting treatments for carbon-related instruments and companies would benefit from receiving guidance on how to do so. Such guidance would also assist auditors and regulators in performing their respective roles.

For auditors, the diversity in accounting treatments becomes an issue in areas requiring the exercise of judgement or in areas with a higher degree of estimation uncertainty where assumptions, in particular those involving forward-looking information, are used. For example, these include accounting for carbon-related instruments, measurement of these instruments, changes in accounting policy, and impairment tests for assets (where carbon-related instruments have been used as one of the inputs). See sections 4.5 and 5.1.4 of the research report (Baboukardos et al. 2025) for details.

‘Both compliance and voluntary carbon markets are developing, and the arrangements are becoming more complex, so standard setters need to understand what companies are doing and use this knowledge to develop the accounting requirements.’

‘Our subsidiary is able to account for carbon credits using IFRS Accounting Standards, but different requirements in the parent’s national GAAP [generally accepted accounting principles] result in the carbon credits being reversed in the consolidated financial statements.’

A synthesis of comments from roundtable participants



‘Users of financial statements would benefit from consistent accounting treatments for carbon-related instruments and companies would benefit from receiving guidance on how to do so.’

2.3 Suggested workflow for determining accounting treatments

In developing its own accounting policy to provide relevant and reliable information about carbon-related instruments, a company refers to and considers applying requirements in IFRS Accounting Standards dealing with similar and related issues before considering the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Conceptual Framework, or other sources.¹

Given the possibility that a company may use more than one type of carbon-related instrument or may use an instrument in more than one way, a blanket accounting

treatment will not faithfully represent the nature, function and intended use of the instrument.

[Figure 2.1](#) explores a suggested workflow and the considerations for accounting treatments by companies that acquire carbon-related instruments to meet their own expected use. The workflow in Figure 2.1 and this section, in general, do not consider the accounting treatments by companies that generate carbon-related instruments or engage with these instruments for other purposes, such as trading or hedging. **They are not exhaustive: they do not cover all possible accounting treatments.**

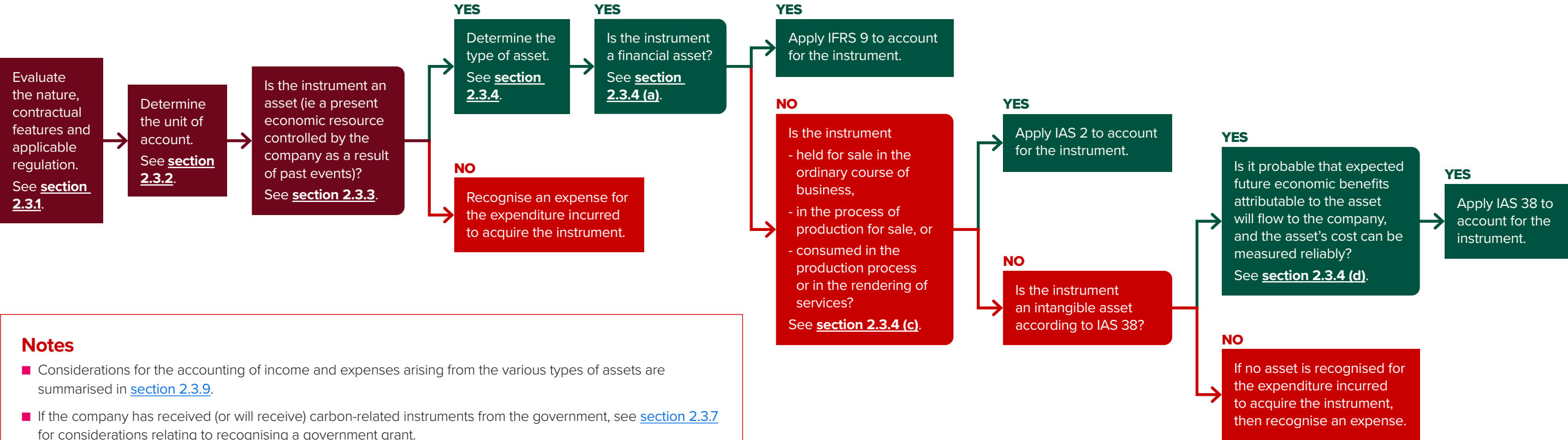
Useful reference

- Read about key accounting issues for carbon credits in this paper by ISDA (International Swaps and Derivatives Association), [Accounting for Carbon Credits](#) (ISDA 2023).
- The European Securities and Markets Authority (ESMA) shares its observation on the different accounting approaches for carbon allowances in the financial statements of European listed issuers in its paper, [Clearing the Smog: Accounting for Carbon Allowances in Financial Statements](#) (ESMA 2024). This paper also explores aspects to consider when developing accounting policies under IFRS Accounting Standards for compliance carbon pricing programmes.
- The following papers by IASB staff provide information only for background purposes and do not constitute guidance.
- In 2014, IASB staff prepared a discussion paper summarising the accounting issues relating to ‘cap-and-trade’ and ‘baseline-and-credit’ schemes, [Summary of Accounting Issues](#) (IASB 2014). Appendix C in the paper highlights some of the approaches applied in practice to account for cap-and-trade schemes using IFRS Accounting Standards at that time.
 - In 2015, IASB staff explored another approach to identifying the nature of the rights and obligations and, consequently, the related assets and liabilities created by a cap-and-trade scheme. The paper, [Why Do We Need a Fresh Approach?](#), is intended to provide context for the IASB staff’s analysis and also explores the limitations of existing accounting standards when used to account for a cap-and-trade scheme (IASB 2015).

¹ See paragraphs 7, 10, 11 and 12 of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* for guidance (IFRS 2025).

Figure 2.1: A suggested workflow to determine the accounting treatment of carbon-related instruments

This diagram depicts a plausible workflow for determining the accounting treatment of a carbon-related instrument by a company that acquires the instrument to meet its own anticipated use. It is not exhaustive.



Notes

- Considerations for the accounting of income and expenses arising from the various types of assets are summarised in [section 2.3.9](#).
- If the company has received (or will receive) carbon-related instruments from the government, see [section 2.3.7](#) for considerations relating to recognising a government grant.
- If the company has an obligation to acquire carbon-related instruments, see [section 2.3.8](#) for considerations relating to recognising a provision.
- See [section 2.3.10](#) for considerations relating to the disclosure of relevant information.
- This workflow and the considerations accompanying it do not substitute reading the IFRS Accounting Standards, the Conceptual Framework or other guidance issued by the IASB. The commentary provided is for general guidance only and does not constitute professional advice.

2.3.1 Evaluating the nature, contractual features and applicable regulation of the instrument

Explore the life cycle of the carbon-related instrument – ie how the instrument was generated, its function and when it will cease to function (or be retired). This helps the company to understand the nature of the instrument (such as an item without physical substance), the terms and conditions (or contractual features) associated with the instrument, when the instrument was generated and its useful life, and regulations to which it is subject. Accounting for carbon-related instruments may be influenced by these elements.

‘Determining whether an instrument is separable from the company and transferable is important if the company intends to trade it, or to hold it as an investment. If the company intends to retire the instrument – ie offset carbon emissions – immediately, then the evaluation becomes less important.’

A finance professional

2.3.2 Determining the unit of account

A company then considers the appropriate unit of account for the carbon-related instrument, whether it is an individual contract or part of one contract or a portfolio of contracts.

The unit of account may be influenced by whether the instrument can be separately identified and whether it is transferable. The instrument’s contractual features may reveal these characteristics.

‘Carbon credits are not expected to be held for a long period. We purchase the same amount of carbon credits monthly to average the cost and intend to retire [use] all carbon credits in the same year.’

‘Companies should make an irrevocable election at initial recognition and maintain the accounting treatment until the instrument is derecognised, so the accounting treatment is consistent from one period to another.’

A synthesis of comments from roundtable participants

2.3.3 Determining whether the instrument is an asset or an expense

According to the Conceptual Framework, an asset is ‘a present economic resource controlled by the entity as a result of past events’. An economic resource is ‘a right that has the potential to produce economic benefits’ (IFRS 2025).² A carbon-related instrument may be recognised as an asset if it meets the definition of an asset.

As noted above, understanding the nature, contractual features and regulations applicable to a carbon-related instrument will help in evaluating whether the instrument meets the definition of an asset. For example, the potential economic benefits a carbon credit provides could be linked to the amount of CO2 (carbon dioxide) that is removed from the atmosphere by regrowing trees at a specified location.

If no asset is recognised when expenditure is incurred to acquire an item, then an expense is recognised.

‘Understanding the nature, contractual features and regulations applicable to a carbon-related instrument will help in evaluating whether the instrument meets the definition of an asset.’

2.3.4 Recognising carbon-related instrument as an asset – which type of asset?

If the carbon-related instrument meets the definition of an asset, the next step is determining the type of asset in the context of IFRS Accounting Standards.

How a company intends to use the instrument also influences the selection of accounting treatment. The company’s business model, its strategy for managing its climate-related risks, the instrument’s contractual features and applicable regulations (for both the company and instrument) may help determine how the instrument will be used. For example, whether the company will retire (use) the instrument immediately or in the future, sell it in the company’s ordinary course of business, or hold the instrument for trading. It’s possible to apply different accounting treatments to individual units of account.

An IFRS Accounting Standard sets out specific conditions for determining the type of asset and the accounting for that asset. For instance, IAS 38 *Intangible Assets* sets out the criteria for recognising an intangible asset (IFRS 2025).

² See paragraphs 4.3 and 4.4 of the Conceptual Framework for Financial Reporting (IFRS 2025).

a) Recognising and measuring a financial asset

Begin by assessing whether the carbon-related instrument is a financial asset (a form of financial instrument).³ An equity instrument (ie a contract that represents a residual interest in the assets of a company after deducting all its liabilities) could be a financial asset.⁴ However, a carbon-related instrument whose function is to reduce carbon emissions is unlikely to be an equity instrument.

A carbon-related instrument that meets the definition of a financial asset should be accounted for in accordance IFRS 9 *Financial Instruments* when the company becomes party to the contractual provisions of the instrument (IFRS 2025).

Classifying the financial asset

Our research found 28 companies that have accounted for their carbon-related instruments as financial assets. Of the 28, 15 companies measured the instruments at fair value while 11 did not specify their measurement approaches. Many of these companies are in fact accounting for derivatives for carbon-related instruments.

If the carbon-related instrument is a financial asset that is not an equity instrument and does not provide contractual cashflows, it will be accounted for as a *‘financial asset measured at fair value through profit or loss (or often referred to as FVPL)’*.⁵ Subsequent changes to the fair value of the instrument (either a gain or loss) will be recognised in the profit or loss.

Also, a company may, at initial recognition, irrevocably designate the financial asset as measured at FVPL if that will eliminate or significantly reduce a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.⁶

Derivatives

A company may acquire a derivative (for example, a forward contract) for carbon-related instruments.⁷ If the instrument is a derivative, the company accounts for the derivative by applying IFRS 9 and measure it at FVPL.

However, contracts that meet the ‘own-use exception’ are normally excluded from the scope of IFRS 9 (see below).

This article does not address hedge accounting using derivatives as a hedging instrument. For guidance on hedge accounting, see Chapter 6 of IFRS 9 (IFRS 2025).

Contracts for buying or selling non-financial items

Generally, contracts for buying or selling non-financial items do not meet the definition of a financial instrument. Such contracts that are entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item to meet the company’s expected purchase, sale or use requirements are outside the scope of IFRS 9 (this is sometimes referred to as the ‘own-use exception’).⁸

For example, a simple contract to purchase carbon-related instruments to settle the company’s obligation to retire a sufficient number of such instruments to offset its carbon emissions would meet the own-use exception.

IFRS 9 does, however, apply to contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments. Such contracts are themselves regarded as financial instruments.

Nonetheless, a company may designate contracts meeting the own-use exception as measured at FVPL (and thus account for the contract in accordance with IFRS 9). This designation is irrevocable, is available only at initial recognition of the contract, and **only if** it eliminates or significantly reduces a recognition inconsistency (sometimes referred to as an ‘accounting mismatch’).⁹

b) Is it an intangible asset or an inventory?

An asset without physical substance that is not a financial instrument is likely to be an intangible asset.¹⁰ Before jumping to this conclusion, it’s worth noting note that IAS 38 specifies that if another IFRS Accounting Standard

prescribes the accounting for a specific type of intangible asset, that standard is applied to account for the asset instead of IAS 38. For example, IAS 38 does not apply to intangible assets held by a company for sale in the ordinary course of business, in which IAS 2 *Inventories* will be applied.¹¹

c) Recognising and measuring an inventory

In evaluating whether a carbon-related instrument is an inventory, a company evaluates whether the instrument is:

- held for sale in the ordinary course of business
- in the process of production for sale, or
- in the form of materials or supplies to be consumed in the production process or in the rendering of services.¹²

If a company sells excess carbon-related instruments that it owns, after satisfying its own expected use, the transaction is unlikely to be a sale in the ordinary course of business.

An instrument meeting one of the conditions above is an inventory and should be accounted for in accordance with IAS 2. Accounting by broker-traders is outside the scope of this article.¹³

‘If a company sells excess carbon-related instruments that it owns, after satisfying its own expected use, the transaction is unlikely to be a sale in the ordinary course of business.’

3 The terms ‘financial asset’ and ‘financial instrument’ are defined in paragraph 11 of IAS 32 *Financial Instruments: Presentation* (IFRS 2025).
4 ‘Equity instrument’ is defined in paragraph 11 of IAS 32 (IFRS 2025).
5 See paragraphs 4.11 – 4.1.4 of IFRS 9 (IFRS 2025).
6 See paragraph 4.1.5 of IFRS 9 (IFRS 2025).
7 A derivative is a financial instrument or other contract within the scope of IFRS 9 with all three of the following characteristics: its value changes in response to the change in a specified variable, it requires no or only a small initial net investment, and it is settled at a future date. See Appendix A of IFRS 9 for the full definition (IFRS 2025).
8 See paragraph 2.4 of IFRS 9 (IFRS 2025).

9 See paragraphs 2.4 – 2.7 of IFRS 9 (IFRS 2025).
10 Paragraph 8 of IAS 38 defines an ‘intangible asset’ as an identifiable non-monetary asset without physical substance. Meanwhile, ‘monetary assets’ is defined as money held and assets to be received in fixed or determinable amounts of money. Though ‘physical substance’ is not defined, paragraphs 4 and 5 of IAS 38 provide a few examples (IFRS 2025).
11 See paragraphs 2(a) and 3(a) of IAS 38 (IFRS 2025).
12 See paragraphs 6 and 8 of IAS 2 (IFRS 2025).
13 Broker-traders are those who buy or sell commodities for others or on their own account and such inventories are principally acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or the broker-traders’ margin. See paragraphs 3(b) and 5 of IAS 2 (IFRS 2025).

Inventories are measured at the lower of cost and net realisable value.

When carbon-related instruments recognised as inventories are sold, the carrying amount of those instruments is recognised as an expense in the period in which the related revenue is recognised. Revenue from the sale of an inventory is recognised in accordance with IFRS 15 *Revenue from Contracts with Customers* (IFRS 2025).

If the inventories (instruments) are consumed in the production process or in the rendering of services and that creates another asset, the carrying amount of those inventories may be allocated to that asset. Such inventories are recognised as an expense during the useful life of that asset. For example, if some instruments recognised as inventories are consumed in the construction of a property, plant or equipment (PPE), their carrying amounts will be allocated to the cost of the PPE and then recognised as an expense when the PPE is depreciated over its useful life.¹⁴

‘In other words, if a carbon-related instrument meets the definition of an intangible asset but does not meet the remaining criteria, expenditure to acquire the instrument will be recognised as an expense.’

d) Recognising and measuring an intangible asset

An intangible asset is an identifiable non-monetary asset without physical substance. A carbon-related instrument that meets the definition of an intangible asset and does not fall within the scope of another IFRS Accounting Standard (eg IAS 2) will be accounted for in accordance with IAS 38.¹⁵

Recognition criteria

A company recognises a carbon-related instrument as an intangible asset if it meets all the following criteria:

- it meets the definition of an intangible asset, and
- it is probable that the expected future economic benefits attributable to the asset will flow to the company, and
- the cost of the asset can be measured reliably.¹⁶

In other words, if a carbon-related instrument meets the definition of an intangible asset but does not meet the remaining criteria, expenditure to acquire the instrument will be recognised as an expense.

To meet the definition of an intangible asset, the carbon-related instrument needs to be identifiable, controlled by the company, and known to provide future economic benefits to the company. The elements of identifiability, control and economic benefits are often interrelated.

An asset is identifiable if either:

- it is separable, or
- it arises from contractual or other legal rights.¹⁷

A company controls an intangible asset (eg a carbon-related instrument) if it has the power to obtain the future economic benefits from the asset, and to restrict others from accessing those benefits. Such control may stem from legal rights that are enforceable in a court of law, though the company may demonstrate it has other ways of controlling the future economic benefits.

The future economic benefits from a carbon-related instrument may include revenue from its sale, or other benefits resulting from the use of the instrument, such as continued access to a market where the company sells its goods or services.

It’s worth noting that IAS 38 sets a higher bar for recognising an intangible asset than the definition of asset in the Conceptual Framework. While the existence of potential to produce economic benefits would already qualify an economic resource controlled by the company to be an asset, IAS 38 requires the fulfilment of that potential to be probable rather than just possible.

A carbon-related instrument that meets all the recognition criteria will be recognised as an intangible asset.

¹⁴ This is a very complex area and requires assessing the relevant facts and circumstances to determine the appropriate accounting treatment. See paragraphs 34 and 35 of IAS 2 and paragraph 16(b) of IAS 16 (both available at IFRS 2025).

¹⁵ See paragraph 2 of IAS 38 (IFRS 2025).

¹⁶ See paragraphs 18 – 23 of IAS 38 (IFRS 2025).

¹⁷ See paragraph 12 of IAS 38 (IFRS 2025).



Measurement of intangible assets – cost or revaluation model

An intangible asset is measured initially at cost. Following initial recognition, a company may choose to measure the intangible asset by using either the cost model or the revaluation model.

Using the cost model, an intangible asset is carried at its cost less any accumulated amortisation and any accumulated impairment losses.

For the revaluation model, an intangible asset is carried at a revalued amount, being its fair value at the date of revaluation less any subsequent accumulated amortisation and any subsequent accumulated impairment losses. It's worth noting that IAS 38 requires the fair value of an intangible asset to be measured by reference to an active market. When an intangible asset is revalued, the carrying amount of that asset is adjusted to the revalued amount. The choice of measuring an intangible asset using the revaluation model would apply to all other assets in its class, unless there is no active market for those assets.¹⁸

Our research identified 54 companies that recognise their carbon-related instruments as intangible assets. Of these 54, 44 companies measure the intangible assets at cost. In only four instances are the intangible assets measured at fair value, while six companies do not disclose their measurement approach (Baboukardos et al. 2025).

‘It’s difficult to measure the fair value of carbon credits. An active market for voluntary carbon credits is less common, unlike some carbon allowances with established markets, such as the EU ETS [EU Emissions Trading Scheme]. Anyway, we purchase carbon credits for our own use and will retire them before the financial year end. Hence, the carbon credits are measured at cost.’

A finance professional

Revaluations are made regularly, such that the carrying amount of the asset at the end of the reporting period does not differ materially from its fair value. The frequency of revaluations depends on the volatility of the fair values of the intangible assets being revalued. That means that intangible assets that experience significant and volatile movements in fair value may require more frequent revaluation.

An increase in the carrying amount of a revalued intangible asset is normally recognised in other comprehensive income (OCI) and accumulated in equity, unless it reverses the revaluation decrease of the same asset previously recognised in profit or loss. On the other hand, a decrease in the carrying amount of a revalued intangible asset should first reduce the amount of revaluation surplus accumulated in equity for the same asset (if any), through OCI, before recognising any remaining decrease in profit or loss.¹⁹

What if it’s no longer possible to measure the fair value of an intangible asset?

Given the current situation, where carbon markets are still developing, it’s also possible that some carbon markets may cease to exist.

If a carbon-related instrument can no longer be revalued because there is no active market, the company needs to do two things:

- measure the carbon-related instrument at its revalued amount at the date of the last revaluation by reference to the active market, less any subsequent accumulated amortisation and any subsequent accumulated impairment losses, and
- test the carbon-related instrument for impairment in accordance with IAS 36 *Impairment of Assets*; the disappearance of an active market indicates that the asset may be impaired.²⁰

If the fair value of the carbon-related instrument can be measured subsequently by reference to an active market, the revaluation model is applied from that date.

¹⁸ See paragraphs 72 and 73 of IAS 38 (IFRS 2025).

¹⁹ See paragraphs 85 – 87 of IAS 38 (IFRS 2025).

²⁰ See paragraphs 81 – 83 of IAS 38 (IFRS 2025).



Useful life and amortisation

In our research, we have not observed any company disclosing the useful life of carbon-related instruments accounted for as intangible assets. Instead, some of them explicitly state that these instruments are tested for impairment. One plausible reason is the duration between acquiring and retiring an instrument is less than one year. Another plausible reason is the useful life of the carbon-related instrument is indefinite.

If an instrument will be held for longer than one accounting period, the company needs to determine the useful life and amortisation method.

An intangible asset with a finite useful life is amortised (on a systematic basis over its useful life), while an intangible asset with an indefinite useful life is not. The amortisation method reflects the pattern in which the company will consume the economic benefits from the instrument. If that pattern cannot be determined reliably, the straight-line method is used. Amortisation is recognised in profit or loss, unless the future economic benefits are used in producing other assets.

Among the factors in IAS 38 guiding companies to determine the useful life of a carbon-related instrument, two of them may be useful:

- the period of control over the asset and legal or similar limits on the use of the asset, and
- whether the useful life of the asset is dependent on the useful life of other assets of the company.

The instrument’s contractual features may reveal both economic and legal factors influencing the useful life of a carbon-related instrument.²¹

If there is no foreseeable limit to the period over which the instrument is expected to generate net cash inflows for the company, then it may be regarded as having an indefinite useful life. A carbon-related instrument with an indefinite useful life needs to be tested for impairment (in accordance with IAS 36) annually, and whenever there is an indication that the instrument may be impaired. In addition, the indefinite useful life is reviewed each period to determine whether considering it to have ‘an indefinite useful life’ continues to be appropriate for that instrument.²²

The residual value of a carbon-related instrument that will be retired is normally zero, unless it is measured using the revaluation model. Companies that intend to dispose of a carbon-related instrument before the end of its economic life may determine a residual value other than zero. The gain or loss arising from the disposal of an intangible asset is recognised in profit or loss.

If a company often sells the carbon-related instruments it owns, the company should assess whether applying IAS 2 (instead of IAS 38) to account for the instrument is more appropriate.

Internally generated intangible assets

The accounting for carbon-related instruments generated by a company as an intangible asset is subject to the instrument’s qualifying for recognition as an internally generated intangible asset. In addition to complying with the general requirements for the recognition and measurement of an intangible asset, there are specific requirements and guidance for the accounting of internally generated intangible assets, which split the expenditure into a ‘research phase’ and a ‘development phase’.²³

This article excludes scenarios where a company generates its own carbon-related instruments. Hence, the accounting treatment of internally generated intangible assets is outside the scope of this article. But it’s worth noting one hurdle that we often come across: measuring the cost of an internally generated carbon-related instrument is challenging because the cost of creating the instrument cannot be distinguished from the cost of day-to-day operations.

‘Accounting for carbon credits generated by a company [eg carbon credit produced through reforestation, renewable energy, or carbon capture, use and storage (CCUS)], is more complicated than accounting for carbon allowances/credits that are purchased or received from the government. It’s difficult to identify and separate expenditure specific to creating the carbon credit from expenditure for the business operations – eg allocating expenditure to the PPE and carbon credits.’

‘A renewable energy certificate [REC] is seen as a by-product of the company’s generation of renewable energy. Allocating costs to the REC is so difficult.’

A synthesis of comments from roundtable participants



21 See paragraphs 94 – 96 of IAS 38 (IFRS 2025).

22 See paragraphs 107 – 110 of IAS 38 (IFRS 2025).

23 See paragraphs 51 – 67 of IAS 38 (IFRS 2025).

2.3.5 Considerations for measuring an asset at cost or fair value

An important factor to consider when deciding to measure a carbon-related instrument at fair value is the existence of an active market for the instrument. If an instrument can be used only within a certain jurisdiction, the existence of an active market in that jurisdiction is paramount.

An active market provides pricing information on a continuous basis and is characterised by the frequency and volume of transactions in the market. In other words, a market with infrequent transactions and/or a low volume of transactions for the instrument is unlikely to be an ‘active market’.

Using a valuation technique (other than reference to an active market) is subject to requirements in the applicable standard, and this requires a robust valuation model.

For companies that intend to retire (use) the carbon-related instrument, the benefit of measuring the instrument at fair value may not outweigh the cost.

If the instrument is acquired externally, the cost is normally known. Nonetheless, what constitutes ‘cost’ in the context of carbon-related instrument is currently unclear, eg whether acquisition cost (often referred to as ‘transaction cost’) forms part of the cost. For now, refer to the applicable standard, such as IAS 2.

‘Unlike share markets where the regulation is more mature, there’s no standardised structure for carbon markets yet. Contractual features, such as terms and conditions, and underlying principles for carbon-related instruments, need to be standardised.’

‘A good valuation model is difficult to develop when carbon markets are still maturing, where uncertainty – including regulation, variation in contractual features and significant price volatility – may overshadow other factors.’

A synthesis of comments from roundtable participants

2.3.6 Impairment of a carbon-related instrument recognised as an asset

‘The existence and quality of the underlying resource, for example, trees, that generated the carbon credit affects the carrying amount. If the underlying resource no longer exists or has degraded, the value of the carbon credit should be reduced – ie an impairment.’

A finance professional

A company needs to evaluate whether the carrying amounts of carbon-related instruments are recoverable and, at the reporting date, no asset is carried at an amount above its recoverable amount.

The potential economic benefits that a carbon-related instrument provides (either through sale or use) are often tied to the underlying resource that generated it. Several factors could reduce the recoverable amount of a carbon-related instrument including (but not limited to) changes in technology or the methodology that certifies the carbon-related instrument, or to regulation or the economic environment.

‘A company needs to evaluate whether the carrying amounts of carbon-related instruments are recoverable and, at the reporting date, no asset is carried at an amount above its recoverable amount.’

Some carbon-related instruments may have been generated from the expected reduction or removal of CO2 by a specific underlying resource, such as a reforestation project. That means, the company should check whether the trees in the reforestation project (ie the underlying resource) continue to exist and that their quality has not declined from the level at which the carbon-related instrument was acquired. If a fire has burnt some of the trees in the forest, the carbon-related instruments generated by the project may be impaired.

Useful reference

You can read about possible factors influencing the price of carbon credits in the voluntary carbon market in this article published by Carbonmark, ‘From \$1 to \$100+: Breaking Down Carbon Credit Pricing in the Voluntary Market’ (Zheleznova 2025).

Read about the challenges in quantifying the amount of CO2 sequestered in a nature-based project and changes to the feasibility of a technology-based project in this article published by the Massachusetts Institute of Technology, ‘Explained: Carbon Credits’ (Chandler 2024).

A decrease in the fair value of financial assets measured at FVPL

A decrease in the fair value of a carbon-related instrument that is a financial asset measured at FVPL is recognised in the profit or loss.

Impairment of inventories

As mentioned earlier, inventories are measured at the lower of cost and net realisable value. An assessment of net realisable value, based on the most reliable evidence available, is made in each subsequent period.²⁴

Impairment of intangible assets

Companies holding these instruments as intangible assets are required, at the end of each reporting period, to assess whether there is any indication that the asset may be impaired. If the instrument is carried as an intangible asset with indefinite useful life, the company needs to test the instrument for impairment annually. The test may be performed at any time during an annual period, provided it is performed at the same time every year.

If an indication of impairment exists, the company shall estimate the recoverable amount of the instrument in accordance with IAS 36 (this exercise is often referred to as an ‘impairment test’).

An impairment loss is normally recognised in profit or loss, unless the asset is carried at a revalued amount. The impairment loss of a revalued asset is treated as a revaluation decrease.

As an input in measuring recoverable amount of another asset

A company may also need to consider whether the cost of carbon-related instruments will influence the recoverable amounts of another asset, including goodwill and cash generating units (CGUs). The rising cost of some carbon-related instruments may mean that these instruments become a significant cost for the future activities of companies that rely on them.

In our research, we found that the cost for carbon-related instruments is considered by 25 companies when testing their assets (primarily goodwill) for impairment.

2.3.7 Recognising and measuring a government grant

A company would usually know whether it has received carbon-related instruments from a government.²⁵ A government may provide these instruments at no cost to specific companies as part of a programme or policy requiring or encouraging these companies to reduce their carbon emissions. The receipt of carbon-related instruments from a government under such a programme or policy may be material information for users.

A government grant may take the form of a transfer of non-monetary assets, such as carbon-related instruments, for the company’s use. A company applies IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* (IFRS 2025) to account for the grant. Nonetheless, the company does not recognise a government grant until it has reasonable assurance of complying with the conditions attached to the grant, and that the grant will be received.²⁶ The receipt of carbon-related instruments, on its own, does not mean the conditions attaching to the grant have been or will be fulfilled.

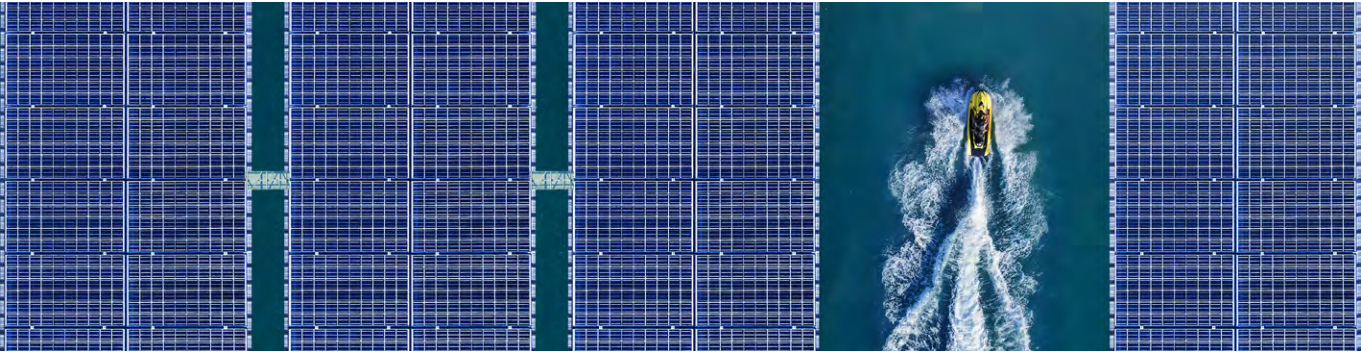
In measuring the grant, the company may choose either:

- to assess the fair value of the carbon-related instrument received and to account for both grant and instrument at that fair value, or
- to account for both the instrument and grant at a nominal amount.²⁷

Even when a carbon-related instrument received as a government grant is an intangible asset and is measured at a nominal amount at initial recognition, it’s possible to measure the instrument subsequently using the revaluation model in IAS 38.²⁸ This depends on the existence of an active market for the instrument. Accounting for intangible assets using the revaluation model is discussed above in [section 2.3.4 \(d\) ‘Recognising and measuring an intangible asset’](#).

Whichever of the above measurement approaches is selected, the company may either:

- present the grant as deferred income in its statement of financial position, or
- deduct the grant in arriving at the carrying amount of the asset.²⁹



24 See paragraphs 28 – 33 of IAS 2 (IFRS 2025).

25 Paragraph 3 of IAS 20 defines a ‘government’ as a government, government agencies and similar bodies whether local, national or international. In addition, ‘government grants’ is defined as assistance by government in the form of transfers of resources to an entity in return for past or future compliance with certain conditions relating to the operating activities of the entity (IFRS 2025).

26 See paragraphs 7 and 8 of IAS 20 (IFRS 2025).

27 See paragraph 23 of IAS 20 (IFRS 2025).

28 See paragraphs 44 and 77 of IAS 38 for guidance (IFRS 2025).

29 See paragraphs 24 – 28 of IAS 20 for guidance (IFRS 2025).

2.3.8 Recognising and measuring an obligation to acquire carbon-related instruments (provision)

A company needs to clearly differentiate liabilities arising from:

- a. the sale of carbon-related instruments (eg where there are obligations attached to the sale), or
- b. its obligation to reduce or remove carbon emissions through other means (ie other than through retiring or surrendering carbon-related instruments), or
- c. its obligation to surrender carbon-related instruments to relevant authorities to comply with regulations, or
- d. its obligation to retire carbon-related instruments.

This section does not analyse the accounting treatment for (a) and (b), but will focus on (c) and (d).

Our research reveals that companies often recognise a provision for their obligations to comply with regulations by surrendering carbon-related instruments to the relevant authorities. These companies have legal obligations either to surrender carbon-related instruments sufficient to correspond with their actual levels of carbon emissions or to retire sufficient carbon-related instruments to offset their actual levels of carbon emissions in a period.

On the other hand, a company may have a constructive obligation to retire carbon-related instruments. This may occur, for example, where a company has created a valid expectation among its customers and lenders that it will reduce its carbon emissions to a target level by a specific date through retiring carbon-related instruments.

By applying IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, a company will recognise a provision only when all the following conditions are met:

- it has a present obligation (legal or constructive) as a result of a past event, and
- an outflow of resources embodying economic benefits to settle the obligation is probable, and
- a reliable estimate can be made of the amount of the obligation.³⁰

If one or more of these conditions are not met, no provision will be recognised.

A company measures the provision at the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The provision is reviewed at the end of each reporting period and adjusted to reflect the current best estimate.³¹

Our research reveals that two methods are currently used in measuring such provisions.

METHOD 1	METHOD 2
Where the company already owns sufficient carbon-related instruments to satisfy its obligation, the provision is measured at the carrying amount of these instruments.	Where the company does not own sufficient carbon-related instruments to satisfy its obligation and needs to acquire additional carbon-related instruments from external sources, the provision is measured at the market price (or fair value) of the instruments.

Interestingly, our research also sheds light on two different practices: ie recognising provisions at gross or at net amounts.

By gross amount , we mean the entire amount that the company will need to pay to settle the obligation, including carbon-related instruments the company already owns and the carbon-related instruments to be acquired from external sources.	By net amount , we mean the amount the company will need to pay to acquire carbon-related instruments from external sources to settle its obligation, ie excluding the carrying amount of carbon-related instruments the company already owns.
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It’s worth noting that the best estimate of the expenditure required to settle the present obligation is the amount that a company would rationally pay to settle the obligation at the end of the reporting period or to transfer the obligation to a third party at that time. When measuring a provision, IAS 37 does not exclude assets that the company already owns.³²

2.3.9 Recognising an income or expense

The accounting for an income or expense arising from a carbon-related instrument is analysed in the respective sections:

- [2.3.4 \(a\) Recognising and measuring a financial asset](#)
- [2.3.4 \(c\) Recognising and measuring an inventory](#)
- [2.3.4 \(d\) Recognising and measuring an intangible asset](#)
- [2.3.6 Impairment of a carbon-related instrument recognised as an asset.](#)

30 See paragraph 14 of IAS 37 for guidance (IFRS 2025). Also, section B of the *Guidance on implementing IAS 37* provides a flowchart guiding preparers in determining whether to recognise a provision, or disclose a contingent liability, or do nothing.

31 See paragraphs 36 and 59 of IAS 37 (IFRS 2025).

32 See paragraphs 36 – 41 of IAS 37 (IFRS 2025).

2.3.10 Disclosure – providing relevant information

Users will benefit from getting a holistic view of a company’s governance and strategy for managing its climate emissions where carbon-related instruments are involved. On this note, presenting coherent and connected information within and outside the financial statements will enhance the transparency and understandability of the company’s engagement with carbon-related instruments.

That means demonstrating, as far as possible, the connection between a company’s business model, risk-management strategy (including management of climate-related risks) and the effects of engaging with carbon-related instruments on its financial position, performance

and cashflows. For companies that apply both IFRS Accounting Standards and IFRS Sustainability Disclosure Standards, this would serve to facilitate connectivity in the reporting under both sets of reporting standards.

For example, a company that discloses information in accordance with IFRS S2 *Climate-related Disclosures* about the carbon credits it uses to offset carbon emissions³³ should help users understand the financial effects of those instruments by connecting such information to the amounts expensed in profit or loss for the period and the carrying amounts (if any) in its statement of financial position.

Another example is disclosing the internal carbon prices used in testing assets (such as goodwill and CGUs) for impairment.³⁴

In contrast, disjointed information about carbon-related instruments in different parts of an annual report (which we observed in some sample companies) potentially causes users to question the objectives for, and the financial effects of, engaging with these instruments.

Given the rising importance of managing climate-related risks, you should evaluate whether the following information (some are already required by the applicable IFRS Accounting Standards) is material information to be disclosed:

- nature, function and intended use of the carbon-related instrument
- accounting policies for the recognition and measurement of the carbon-related instrument
- carrying amount of the carbon-related instrument at reporting date
- useful life of any carbon-related instrument recognised as an intangible asset
- amounts expensed in profit or loss during the period
- gain or loss on the fair value of carbon-related instrument during the period
- impairment loss recognised during the period and the reasons for impairment.

‘Carbon credits will be an important and continuing feature of companies’ transition towards net zero. Companies need to be transparent about the quality of the underlying projects that generated the carbon credits’.

‘Existing disclosure requirements in IAS 2 and IAS 38 do not specifically require information about the nature of carbon credits and how the company uses them’.

A synthesis of comments from roundtable participants

33 Companies that use carbon credits to offset carbon emissions and apply the IFRS Sustainability Disclosure Standards are required to provide information about the type of carbon credit (including whether the underlying offset is nature-based or technology-based, and whether the offset is achieved through carbon reduction or removal), the third-party schemes that verified or certified the carbon credits, and other information that would help users understand the carbon credits’ credibility and integrity. See paragraphs 36(e)(ii), (iii) and (iv) of IFRS S2 *Climate-related Disclosures* (ISSB 2023).

34 Companies that apply the IFRS Sustainability Disclosure Standards are required to disclose whether and, if so, how the company applies a carbon price in decision-making. See paragraph 29(f)(i) of IFRS S2 (ISSB 2023).



2.4 Recommendations

‘Given the growing importance of carbon markets and associated accounting for carbon-related instruments, good-quality information about such instruments would benefit a broad spectrum of stakeholders in the corporate reporting ecosystem.’

Aaron Saw, Head of Corporate Reporting Insights – Financial, ACCA

Companies need globally applicable guidance for consistent accounting and reporting of carbon-related instruments. Such guidance should help determine:

- the appropriate **scope** when accounting for each carbon-related instrument that faithfully represents its nature, function and intended use
- **when** and **how** to recognise the instrument
- the appropriate **measurement approaches**, and
- relevant **disclosures** to enable users to evaluate the financial effects of such an instrument on the company, including its nature, function and intended use.

The guidance needs to encompass the characteristics of carbon markets and associated instruments across different jurisdictions, including markets in emerging economies.

‘Standard setters playing catch up when the carbon market is fully developed is too late, as companies already put different accounting treatments in place, plus the system and processes for reporting. Companies will be more resistant to change.’

‘Companies forming their own accounting policies or employing accountancy firms to form accounting policies means that ‘sufficient guidance’ is not available.’

A synthesis of comments from roundtable participants

‘Companies need globally applicable guidance for consistent accounting and reporting of carbon-related instruments.’

In addition, **introducing an overarching term** would serve as a stepping stone in developing guidance for the accounting for and reporting of carbon-related instruments. Arguably, the term ‘carbon-related instruments’ adopted in our research report could serve as this overarching term.

The overarching term should be defined using common features or characteristics of the instruments, considering their purpose, how they were generated and how they will be retired. This will future proof the term as new instruments are developed and become available. A narrowly defined term would risk scoping out an instrument simply because of the definition. The definitions for instruments from different carbon markets should be aligned and updated when new instruments are developed.

‘An overarching term for all emissions-related items will avoid a situation where jurisdictions create their own terms and definitions. This is not helpful for multinationals. The definition for the overarching term needs to clearly describe the features or characteristics of carbon-related instruments so we can evaluate whether an instrument is in-scope or falls outside the scope’.

‘A narrowly defined term will make it easier for tax authorities to set rules on the taxability or deductibility of the instrument’.

A synthesis of comments from roundtable participants

All companies that engage with carbon-related instruments should provide feedback and relevant evidence on the prevalence and significance of carbon-related instruments to the IASB to convince the IASB to pursue the *Pollutant Pricing Mechanism (PPM)* project in its 2027 – 2031 work plan.³⁵

We also encourage the IASB to continue horizon scanning to gauge the evolving state of play among companies around the world and consider the proposals or white papers from national standard setters and other reporting-related bodies, such as ISDA and ESMA, to promote best practice and consistency of accounting treatments.

Our recommended interventions for specific groups of stakeholders in the corporate reporting ecosystem are summarised in [Figure 2.2](#). For details of the recommendations for each group of stakeholders, refer to section 5.2 of the research report (Baboukardos 2025).

³⁵ IASB staff have been conducting horizon-scanning to assess whether a project on PPM needs to be added to the IASB’s work plan. In January 2025, the IASB decided to defer its decision to add the PPM project to its workplan to its Fourth Agenda Consultation. This will allow the IASB and its stakeholders to form a more holistic opinion about the necessity of a PPM project (IASB 2025).

Figure 2.2: Recommended interventions for various stakeholders in corporate reporting



Source Baboukardos et al. 2025: 6

References.

Baboukardos, D., Dionysiou, D., Slack, R., Tsalavoutas, I. and Tsoligkas, F. (2025), *Reality of Accounting for Carbon-related Instruments*. Downloadable from <<https://www.accaglobal.com/uk/en/professional-insights/global-profession/carbon-related-instruments.html>>, accessed 8 June 2025.

Chandler, D.L. (2024), 'Explained: Carbon Credits' [newsletter article], *MIT News*, 28 February <<https://news.mit.edu/2024/explained-carbon-credits-0228>>, accessed 10 June 2025.

ESMA (European Securities and Markets Authority) (2024) *Clearing the Smog: Accounting for Carbon Allowances in Financial Statements*, <https://www.esma.europa.eu/sites/default/files/2024-10/ESMA32-483087481-68_Statement_Clearing_the_smog_-_Accounting_for_Carbon_Allowances_in_the_FS.pdf>, accessed 8 January 2025.

IASB (2014), *Summary of Accounting Issues*, IASB Staff Paper Agenda Ref. 6B, <<https://www.ifrs.org/content/dam/ifrs/meetings/2014/november/iasb/pollutant-pricing-mechanisms/ap06b-emissions-trading-schemes.pdf>>, accessed 3 January 2025.

IASB (2015), *Why Do We Need a Fresh Approach?* IASB Staff Paper Agenda Ref. 6A, <<https://www.ifrs.org/content/dam/ifrs/meetings/2015/june/iasb/pollutant-pricing-mechanisms/ap06a-pollutant-pricing-mechanisms.pdf>>, accessed 3 January 2025.

IASB (2025), *Horizon-scanning activities and prioritisation considerations*, IASB Staff Paper Agenda Ref. 10, <<https://www.ifrs.org/content/dam/ifrs/meetings/2025/january/iasb/ap10-horizon-scanning-activities-prioritisation-considerations.pdf>>, accessed 19 February 2025.

IFRS (2025), 'Accounting Standards Navigator' [website resource]. All IFRS Accounting Standards issued by the IASB are accessible on this site, at <<https://www.ifrs.org/issued-standards/list-of-standards/>>, accessed 10 June 2025.

ISDA (International Swaps and Derivatives Association) (2023), *Accounting for Carbon Credits*, <<https://www.isda.org/a/Vf7gE/Accounting-for-Carbon-Credits.pdf>>, accessed 8 January 2025.

ISSB (International Sustainability Standards Board) (2023), 'IFRS S2 Climate-related Disclosures: About' [website article with link to IFRS S2 for registered persons] <<https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/#about>>, accessed 18 February 2025.

Saw (2025), *Carbon-related Instruments – Companies' Perspectives and Relevant Implications*. Downloadable from <<https://www.accaglobal.com/uk/en/professional-insights/global-profession/carbon-related-instruments.html>>.

Zheleznova, O. (2025), 'From \$1 to \$100+: Breaking Down Carbon Credit Pricing in the Voluntary Market' [online article] <<https://www.carbonmark.com/post/understanding-carbon-credit-pricing>>, accessed 10 June 2025.



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