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ISCA Financial Reporting Bulletin 11

FRB 11:
Accounting for Carbon Credits:
From the perspective of a buyer / holder

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The terms of reference are executed through FRC with the support of two Sub-Committees, namely the Core Sub-Committee and the Valuation Sub-Committee.

Important note:

- References made to the publicly available information (including relevant regulations on carbon credits in Singapore) are accurate as at the date of issuance of this FRB.

- This FRB focuses on the accounting considerations under Singapore Financial Reporting Standards (International) (SFRS(I)s) for carbon credits that an entity acquires voluntarily on a stand-alone basis. For carbon credits that are purchased/bundled with other goods or services, this FRB does not provide guidance on how to split the various components for accounting purposes.

- Although this FRB makes reference to SFRS(I) 13 *Fair Value Measurement*, SFRS(I) 1-2 *Inventories* and SFRS(I) 1-38 *Intangible Assets*, the guidance in this FRB is also applicable to entities applying FRS 113 *Fair Value Measurement*, FRS 2 *Inventories* and FRS 38 *Intangible Assets*.

- This FRB is not comprehensive and **does not address**:

  - all possible accounting considerations for all types of carbon credits. The appropriate accounting treatment of carbon credits depend on the entity's facts and circumstances, as well as the terms and conditions attached to the carbon credit in question. Significant judgement may be required and auditors or professional advisors should be consulted as needed.

  - the accounting of the tax effect arising from holding, selling or consuming the carbon credits. References made to IRAS' regulations relating to tax treatment of carbon credits in this FRB have been included for information.

Executive Summary

Since Singapore's implementation of the carbon tax regime, entities are increasingly looking to using carbon credits to reduce carbon emissions and/or meet sustainability targets. Questions have emerged regarding the definition of carbon credits and the appropriate accounting treatment and reporting of carbon credits.

What is a carbon credit?

The term 'carbon credit' and 'carbon offset' are sometimes used interchangeably in published literature. In this FRB, we have used the term 'carbon credit' as it is used in IFRS S2 *Climate-related Disclosures* and by the Inland Revenue Authority of Singapore (IRAS).

Basically, a carbon credit is a verifiable instrument that represents the reduction or removal of one metric tonne of carbon dioxide or other greenhouse gases, and that can be held for own use (i.e. carbon credit is used to offset the entity's own emissions of carbon dioxide or other greenhouse gases), traded, or retired (i.e. once the carbon credit is utilised, it is removed from circulation and cannot be sold or used again) to meet emissions reduction targets.

Singapore's carbon tax regime

Singapore does not have a cap-and-trade emissions trading system (also referred to as 'compliance markets'). Instead, carbon credits are voluntarily acquired (and/or traded) by entities who use carbon credits as part of their strategy to reduce carbon emissions and/or meet sustainability targets (also referred to as 'voluntary markets'). Hence, the focus of this FRB is on carbon credits that an entity acquires voluntarily.

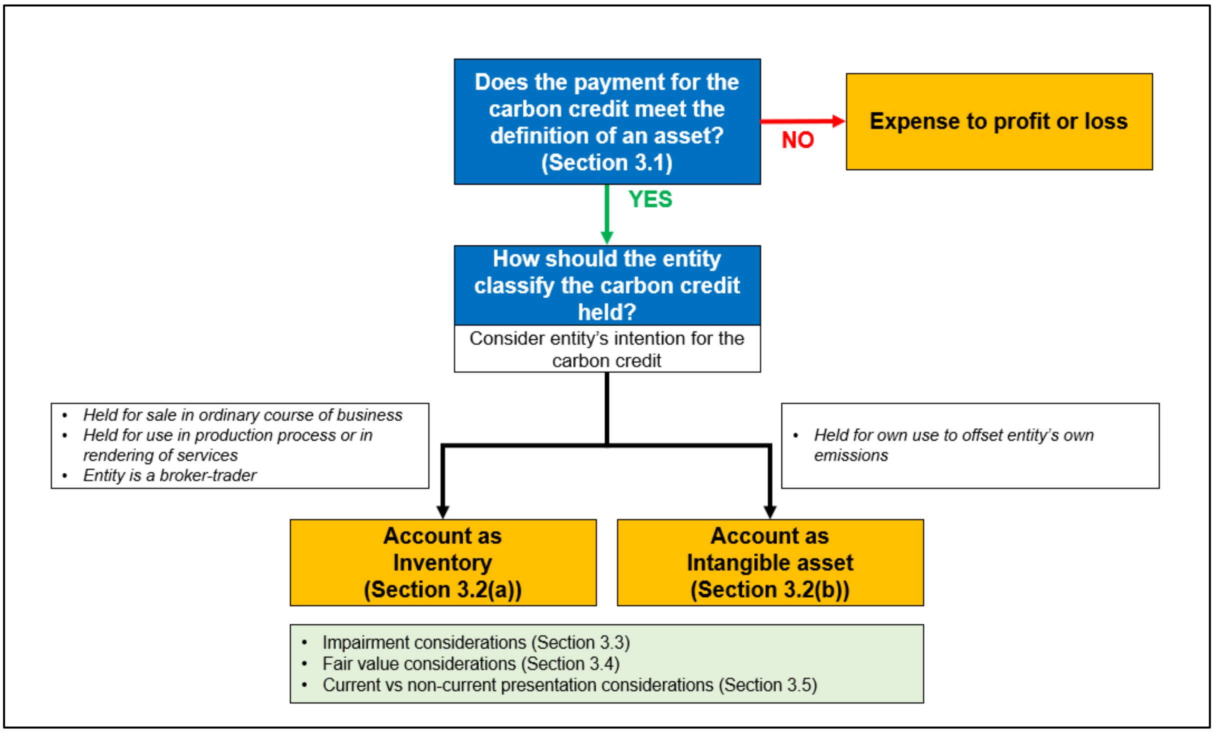
The National Environment Agency is the administrator of Singapore's carbon tax regime, and the relevant legislation is the Carbon Pricing Act and its accompanying Regulations. The International Carbon Credit (ICC) Framework was introduced in November 2022, alongside the progressive increase in carbon tax rate, to allow entities to use high quality ICCs to offset up to 5% of their taxable carbon emissions from 2024.

Relevant regulations on carbon credits in Singapore has been included in **Appendix A** for information.

Accounting for carbon credits

Under SFRS(I)s, there is currently no specific accounting standard or interpretation that addresses the accounting for voluntary purchases of carbon credits. The appropriate accounting treatment depends on the specific terms attached to each carbon credit, the entity's facts and circumstances and the intended use of the carbon credits.

To aid entities in selecting the most appropriate accounting standard to apply for voluntary purchases of carbon credits on a stand-alone basis (including those carbon credits which have been unbundled, this FRB sets out the key considerations that the entity should have in selecting the most appropriate accounting standard under SFRS(I) to apply for voluntary purchases of carbon credits on a stand-alone basis.[1] The diagram below summarises those considerations.



It should be noted that paragraph 10 of SFRS(I) 1-8 *Accounting Policies, Changes in Accounting Estimates and Errors* requires that, in the absence of an applicable standard or interpretation to a transaction, event or condition, management should use its judgment in developing and applying an accounting policy that is relevant and reliable. The accounting policy should be applied consistently to all similar transactions.

[1] When carbon credits are purchased/bundled with other goods or services, entities will need to unbundle/split the various components for accounting purposes. This process requires significant judgement, as it depends on the facts and circumstances, including terms agreed between the contracting parties. Hence, this FRB does not provide guidance on how to unbundle the components.

Considerations for contracts to acquire carbon credits in the future

Entities may enter into contracts/arrangements to acquire carbon credits in the future (i.e. as holders of carbon credits). Examples of such contracts/arrangements include:

- An entity providing funds (in the form of debt or equity instruments acquired) to fund a carbon offset project that provides returns in the form of carbon credits.
- An entity entering into a physical power purchase agreement with a windfarm and when the energy is produced, the windfarm will feed the energy produced to the grid and transfer the carbon credits to the entity. [2]

For such contracts/arrangements, in addition to considering the accounting treatment of the carbon credits, entities will need to consider how to account for other elements/components in the contract/arrangement. Section 3.6 of this FRB contains further examples of such situations and some additional questions to be considered by the entity.

To reiterate, the appropriate accounting treatment varies depending on factors such as terms and conditions attached to the carbon credit and the entity's facts and circumstances. It is, therefore, imperative for the entity to have a full understanding of the contract/arrangement as well as the carbon credit in question to identify the most appropriate accounting standard to apply.

[2] In this example, the windfarm will transfer the carbon credits to the entity. In practice, renewable energy production facilities may also provide Renewable Energy Certificates (RECs) to renewable energy buyers. A REC is typically an instrument certifying that the energy that an entity uses is produced from renewable energy sources. Therefore, a REC is different from a carbon credit and there are different accounting considerations for holders of RECs. These accounting considerations will be covered in a subsequent technical guidance by ISCA.

Contents

1. Background

Since Singapore's introduction of carbon taxes through the Carbon Pricing Act (CPA) in 2019, there has been increasing interest by entities in the use of carbon credits to reduce carbon emissions and/or meet sustainability targets.[3] To support Singapore's ambition of achieving net zero emissions by 2050, the CPA was amended in 2022.[4] Among the amendments made, the carbon tax rates will be increased in coming years, and companies are allowed to offset up to 5% of their taxable carbon emissions through the purchase of eligible international carbon credits starting from 2024.[5] With this, entities are exploring the option of buying or investing in carbon credits with new vigour.

1.1 What is the issue?

Questions have emerged regarding the accounting and reporting for voluntary carbon credits. There is currently no specific accounting standard or interpretation that addresses the accounting for the voluntary purchase of carbon credits.[6] The appropriate accounting treatment depends on the specific terms attached to each carbon credit, the entity's facts and circumstances and the intended use of the carbon credits.

1.2 Purpose and scope of this FRB

ISCA, through its Financial Reporting Committee, is issuing this FRB to aid entities in understanding what carbon credits are, and the key considerations that the entity should have in selecting the most appropriate accounting standard under SFRS(I) to apply for voluntary purchases of carbon credits on a stand-alone basis.

Note: For carbon credits that are purchased/bundled with other goods or services, entities will need to unbundle/split the various elements/components for accounting purposes. However, guidance on how to perform the unbundling/splitting is not provided in this FRB.

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[3] Carbon Pricing Act 2018 [link]

[4] Carbon Pricing (Amendment) Bill [link]

[5] All international carbon credits used under the carbon tax regime will need to adhere to a set of eligibility criteria to ensure that they are of high environmental integrity and represent emissions reductions or removals that occur within the timeframe specified under Article 6 of the Paris Agreement.

[6] In December 2004, the International Accounting Standards Board (IASB) issued IFRIC 3 *Emissions Rights* primarily to provide guidance on the accounting for cap and trade emissions trading schemes [link]. However, IFRIC 3 was withdrawn in 2005 due to feedback that the accounting mismatches it created, both in recognition and measurement bases, were inappropriate. After the withdrawal of IFRIC 3, there had been numerous discussions by the IASB to develop guidance on the accounting for emissions trading schemes. In 2015, the IASB initiated a new research project titled 'Pollutant Pricing Mechanisms' to consider accounting diversity that may arise from schemes that use emissions allowances to manage the emission of pollutants [link]. This project remained inactive in the IASB's research pipeline until July 2022 when the IASB decided to add this project to its reserve list of projects following feedback from the Third Agenda Consultation [link]. As such, this project could be added to the IASB's workplan if additional capacity becomes available.

2. What are carbon credits?

IFRS S2 *Climate-related Disclosures* defines a carbon credit as follows:[7]

An emissions unit that is issued by a carbon crediting programme and represents an emission reduction or removal of greenhouse gases. Carbon credits are uniquely serialised, issued, tracked and cancelled by means of an electronic registry.

For the purpose of GST, the Inland Revenue Authority of Singapore (IRAS) defines a carbon credit as follows: [8]

> *A carbon credit means —*
> *(a) a certificate representing an amount of greenhouse gas emissions reduction or removal, generated from any project or programme, and includes a certificate representing the avoidance of an amount of such emissions;*
> *(b) a right to emit any greenhouse gas; or*
> *(c) a means to satisfy any tax or regulatory obligation arising from the emission of any greenhouse gas,*
> *and includes a carbon credit issued by the National Environment Agency (NEA) for businesses to meet their carbon tax obligations in Singapore.*
>
> *Carbon credits are issued/verified by government registries or independent standards/registries such as Verra, Gold Standard, Climate Action Reserve and American Carbon Registry. Each verified carbon credit would be issued with a unique serial number; hence it is not an unallocated commodity for the purpose of GST.*

Basically, a carbon credit is a verifiable instrument that represents the reduction or removal of one metric tonne of carbon dioxide or other greenhouse gases, and that can be held for own use (i.e. to offset the entity's own emissions of carbon dioxide or other greenhouse gases), traded, or retired (i.e. once the carbon credit is utilised, it is removed from circulation and cannot be sold or used again) to meet emissions reduction targets. Under IRAS' definition, a carbon credit can also represent a right to emit greenhouse gases which is common in cap-and-trade emissions trading systems. However, Singapore does not have such a system, and carbon credits are voluntarily acquired (and/or traded) by entities to reduce emissions and/or meet sustainability targets. Hence, the focus of this FRB is on carbon credits that an entity acquires voluntarily.

[7] IFRS S2 *Climate-related Disclosures* [link]

[8] IRAS website – Carbon Credits [link]

3. Accounting considerations

3.1 Does the payment for the carbon credit meet the definition of an asset?

The first question entities should ask is whether the carbon credits meet the definition of an asset under the SFRS(I)s.

The SFRS(I) Conceptual Framework for Financial Reporting defines an asset to be a present economic resource (a right that has the potential to produce economic benefits) controlled by the entity as a result of past events.[9]

In some cases, it can be obvious that a carbon credit is a separate asset, for instance, when the entity pays to separately acquire a carbon credit that is traded on an exchange. To qualify as an asset, the carbon credit does not necessarily need to be actively traded on an exchange.

In other cases, if the carbon credit is acquired as part of a larger transaction, the entity would need to further assess if the carbon credit qualifies to be recognised as a separate asset (see * below) or the carbon credits are immediately retired on acquisition. Therefore, it is critical that the entity fully understands the nature of the arrangement to acquire the carbon credits in question.

Some questions to consider include:

- What is the arrangement under which the carbon credits are acquired?
- Are the carbon credits acquired as part of a larger transaction*? The entity needs to consider if the carbon credits qualify as a separate asset to be recognised.
    - *Example: Entity A entered into a power purchase agreement with a windfarm and when the electricity is produced, the windfarm will feed the electricity to the grid and Entity A will get its electricity from the grid. The windfarm will concurrently transfer carbon credits to Entity A. The carbon credits qualify to be recognised as a separate asset by Entity A.*
- What are the terms and conditions attached to the carbon credits?

3.2 How should the entity classify the asset (carbon credit) held – as inventory or intangible asset?

After determining that the carbon credits meet the definition of an asset as a separate unit of account, the next question the entity should ask is what the business purpose of the carbon credits is. Does the entity intend to actively trade the carbon credits, or does it intend to hold the carbon credits for its own use to offset the entity's own emissions of carbon dioxide or other greenhouse gases?

If the entity intends to actively trade the carbon credits, it will be appropriate to account for the carbon credits as inventory under SFRS(I) 1-2 *Inventories*. If the entity intends to hold the carbon credits for its own use to offset the entity's own emissions of carbon dioxide or other greenhouse gases, accounting for the carbon credits as intangible assets under SFRS(I) 1-38 *Intangible Assets* will be appropriate. If the entity retires the carbon credits immediately after acquisition, immediate recognition in profit or loss will be the most appropriate unless the costs qualify for capitalisation under another accounting standard (e.g. inventory cost under SFRS(I) 1-2 for production of carbon-neutral products).

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[9] Paragraphs 4.3 and 4.4 of the SFRS(I) Conceptual Framework for Financial Reporting

(a) Accounting as inventory under SFRS(I) 1-2

Definition of inventory

Under SFRS(I) 1-2, inventories are assets that are:[10]

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

Recognition

A carbon credit that is separable and transferable will meet the definition of inventory if:

- they are assets held for sale in the ordinary course of business; or
- they are consumed in the production process (e.g. for carbon-neutral products) or in the rendering of services.

Measurement

The carbon credits are measured at cost at initial recognition and subsequently measured at the lower of cost and net realisable value*.

*Note: As the net realisable value is entity-specific, it may not be the same as 'fair value less costs to sell'. Estimates of net realisable value are based on the most reliable evidence available and must take into consideration:

- fluctuations of price or cost directly relating to events occurring after the end of the reporting period, but only to the extent that the events confirm conditions existing at the end of the reporting period; and
- purpose for which the inventory is held.[11]

Broker-trader entities that consider carbon credits to be commodities (i.e. inventories that are principally acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker-traders' margin) can elect to measure them at fair value less costs to sell with changes in fair value recognised in profit or loss.[12,13] Please see **Section 3.4** for considerations in relation to 'fair value'.

Derecognition

Carbon credits are derecognised when they are sold, transferred or retired as part of the production process.

Entities should also note the following:

- Carbon credits held for own use and trading must be separately accounted for.
- Income from the sale of carbon credits that are accounted for as inventories must be recognised as revenue in accordance with SFRS(I) 15 *Revenue from Contracts with Customers*.

[10] Paragraph 6 of SFRS(I) 1-2

[11] Paragraphs 30 and 31 of SFRS(I) 1-2

[12] Paragraph 3(b) of SFRS(I) 1-2

[13] Paragraph 5 of SFRS(I) 1-2

(b) Accounting as intangible assets under SFRS(I) 1-38

Paragraph 2 of SFRS(I) 1-38 explains that the standard should be applied for all intangible assets unless they fall within the scope of another standard.

Carbon credits that are not accounted for under SFRS(I) 1-2, will be accounted for as intangible assets under SFRS(I) 1-38 **if they meet the definition and recognition criteria** for intangible assets.

Definition of intangible asset
Under SFRS(I) 1-38, an intangible asset is an identifiable non-monetary asset without physical substance.[14] A carbon credit may meet this definition as follows:

Identifiable	A carbon credit is typically a verifiable instrument which may be tradeable and transferrable. In such cases, the carbon credit may potentially meet the requirements of being separable or arising from contractual or other legal rights.[15] **Note** It is important to understand the terms and conditions of the carbon credit in question and the nature of the arrangement in order to ascertain if that carbon credit is identifiable. For examples of carbon credits which are identifiable, the entity may refer to the Eligibility List under the International Carbon Credit Framework published by the Ministry of Sustainability and the Environment and the National Environment Agency.[16]
Non-monetary	A carbon credit is not cash and is not a right to receive (or an obligation to deliver) a fixed or determinable number of units of currency.[17]
Without physical substance	A carbon credit is not tangible.

Additionally, the entity needs to assess if it has control over the carbon credit (i.e. having the power to obtain future economic benefits flowing from the asset and restricting access of others to the benefits) in accordance with the requirements set out in paragraphs 13 to 16 of SFRS(I) 1-38. For carbon credits which are uniquely serialised and tracked in an electronic registry, they are likely to meet these requirements. However, it is still important for the entity to understand the workings of the registry (that the carbon credit is registered in) so as to understand the entity's rights as the holder of that carbon credit.

[14] Paragraph 8 of SFRS(I) 1-38

[15] Paragraph 12 of SFRS(I) 1-38

[16] Eligibility List under the International Carbon Credit (ICC) Framework

[17] Paragraph 16 of SFRS(I) 1-21 *The Effects of Changes in Foreign Exchange Rates*

Recognition

A carbon credit is recognised as an intangible asset if, and only if:[18]

- it is probable that the expected future economic benefits that are attributable to the carbon credit will flow to the entity; and
- the cost of the carbon credit can be measured reliably.

Note: the probability recognition criterion is always considered to be satisfied for separately acquired intangible assets.[19]

Measurement

An intangible asset is measured at cost on initial recognition and subsequently measured using either the cost model or the revaluation model:

- cost model: the intangible asset is measured at cost less accumulated amortisation less accumulated impairment losses.[20]
- revaluation model: the intangible asset is carried at revalued amount (being its fair value at the date of revaluation) less any subsequent accumulated amortisation and any subsequent accumulated impairment losses. [21]

Note: An entity can apply the revaluation model only if the fair value of the intangible asset can be determined by reference to an active market. Please see **Section 3.4** for considerations in relation to 'fair value'.

Determination of useful life and amortisation method

An entity is required to assess whether the useful life of an intangible asset is finite or indefinite.[22] Useful life is:[23]

- the period over which an asset is expected to be available for use by an entity; or
- the number of production or similar units expected to be obtained from the asset by an entity.

Factors to be considered in determining the useful life of an intangible asset are set out in paragraph 90 of SFRS(I) 1-38.

For an intangible asset with finite useful life, the amortisation method used should reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.[24]

The implications of the above are:

- Amortisation: an intangible asset with a finite useful life is amortised while an intangible asset with an indefinite useful life is not. [25]

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[18] Paragraph 21 of SFRS(I) 1-38

[19] Paragraph 25 of SFRS(I) 1-38

[20] Paragraph 74 of SFRS(I) 1-38

[21] Paragraph 75 of SFRS(I) 1-38

[22] Paragraph 88 of SFRS(I) 1-38

[23] Paragraph 8 of SFRS(I) 1-38

[24] Paragraph 97 of SFRS(I) 1-38

[25] Paragraph 89 of SFRS(I) 1-38

- Impairment: an intangible asset with a finite useful life is tested for impairment when impairment indicators exist while an intangible asset with an indefinite useful life is tested for impairment at least annually or more frequently if impairment indicators exist.[26] Please refer to **Section 3.3** for considerations in relation to 'impairment'.

When applying the above principles under SFRS(I) 1-38 to holdings of carbon credits, it should be noted that generally, carbon credits do not have expiry dates and the economic benefits of the carbon credits are consumed, and related expense recognised in the period only when they are sold, transferred or retired. During the holding period, there is no consumption of economic benefits, hence, no amortisation is recorded.

Derecognition
Carbon credits are derecognised when they are sold, transferred or retired.

Key takeaways
The holding of a carbon credit is accounted for as inventory under SFRS(I) 1-2 if an entity holds it for sale in the ordinary course of business or uses the carbon credit in the production process for such sale or consumes the carbon credit in the production process or in the rendering of services.

If SFRS(I) 1-2 is not applicable, the carbon credit is accounted for as an intangible asset under SFRS(I) 1-38 if it meets the definition and recognition for intangible assets.

3.3 Impairment Considerations

[Note: The considerations set out in this section are applicable to carbon credits which are accounted for as intangible assets under SFRS(I) 1-38.]

The underlying principle under SFRS(I) 1-36 *Impairment of Assets* is that an asset must not be carried in an entity's financial statements at more than its recoverable amount (either by using it or selling it). An asset is impaired and has to be written down to its recoverable amount if its carrying amount exceeds its recoverable amount.

The recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs of disposal and its value in use.[27]

The fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date.[28] Please refer to **Section 3.4** for considerations in relation to 'fair value'.

[26] Paragraph 108 of SFRS(I) 1-38

[27] Paragraph 18 of SFRS(I) 1-36

[28] Paragraph 6 of SFRS(I) 1-36

The value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.[29] Future cash flows are estimated based on management's best estimates of the economic conditions that will exist over the remaining useful life of the asset. This judgement can be difficult to make, entities are reminded that the assumptions used should be reasonable and supportable and reflect the conditions existing at the financial reporting date.

Key takeaways

An asset must not be carried at more than its recoverable amount (either through use or sale). Any difference between the carrying amount and the recoverable amount is recorded as an impairment loss.

Finite-life carbon credit is tested for impairment when impairment indicators exist, and indefinite-life carbon credit is tested for impairment at least annually.

Judgements and assumptions used in determining the recoverable amount should be reasonable and supportable.

Appropriate disclosures are to be made in the financial statements to enable stakeholders to understand how the recoverable amount is measured (including judgements and assumptions made) and their impact on current and future periods.

3.4 Fair Value Considerations

Fair value is defined in SFRS(I) 13 *Fair Value Measurement* as the price that would be received to sell an asset or paid to transfer a liability at the measurement date under current market conditions in an orderly transaction between market participants in the principal market (or, if there is no principal market, the most advantageous market).[30] The principal market is one with the greatest volume and level of activity for the relevant asset.[31]

The most reliable evidence of fair value of an item is its quoted price in an active market. An active market is defined in SFRS(I) 13 as a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.[25]

In determining and making reference to an "active market", the holder needs to assess if transactions for its carbon credits are made with sufficient frequency and volume. However, SFRS(I) 13 does not provide guidance on what constitutes 'sufficient frequency' and 'sufficient volume' and professional judgement is required to be applied.

If it is determined that no active market exists, the holder measures fair value using another valuation technique that maximises the use of relevant observable inputs and minimises the use of unobservable inputs to achieve the fair value measurement objective, i.e. "to estimate an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability".

[29] Paragraph 6 of SFRS(I) 1-36

[30] Paragraphs 9, 15 and 16 of SFRS(I) 13

[31] Appendix A of SFRS(I) 13

For carbon credits which are accounted for as intangible assets, the following should be noted:

- The revaluation model can be applied to the entity's holding of carbon credits **only if** the fair value of the carbon credits can be determined by reference to an active market.
- If no active market exists, the carbon credits cannot be revalued. The carbon credits should be carried at their cost less any accumulated amortisation and impairment losses. [32]
- If the active market no longer exists, the carrying amount of the carbon credits shall be 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.[33]

SFRS(I) 13 specifies disclosure requirements to help users of financial statements assess valuation techniques and inputs used to develop those measurements for assets and liabilities that are measured at fair value.

Key takeaways

The most reliable evidence of fair value is its quoted price in an active market. When determining and making reference to an 'active market', judgement is required to assess that transactions for the carbon credits are made with sufficient frequency and volume.

For carbon credits accounted for as intangible assets, the revaluation model can be applied to these carbon credits only if the fair value of the carbon credits can be determined by reference to an active market.

Appropriate disclosures are to be made in the financial statements to enable stakeholders to understand how fair value is measured (including judgement and assumptions made) and their impact on current and future periods.

3.5 Current vs Non-current Presentation Considerations

Paragraph 66 of SFRS(I) 1-1 *Presentation of Financial Statements* requires assets, in addition to cash and cash equivalents, to be classified as current when the asset is expected to be realised, used or sold within the entity's normal operating cycle; or primarily held for trading, or expected to be realised within twelve months after the reporting period.

Carbon credits accounted as inventory are either held for trading or sold, consumed or realised as part of the entity's normal operating cycle. Such carbon credits are classified as current assets in the entity's financial statements.

The classification of carbon credits accounted as intangible assets as current or non-current depends on the expected timing of consumption of the asset. Intangible assets are generally classified as non-current in an entity's financial statements due to their long-term nature. However, SFRS(I) 1-38 does not require that intangible assets are expected to be used for more than one period unlike in SFRS(I) 1-16 *Property, Plant and Equipment*. [34]

[32] Paragraph 81 of SFRS(I) 1-38

[33] Paragraph 82 of SFRS(I) 1-38

[34] Paragraph 6 of SFRS(I) 1-16

It is, therefore, possible for intangible assets to be classified as current assets in cases where the carbon credits are expected to be consumed/used within twelve months after the reporting period or within the entity's normal operating cycle. In cases where the entity expects to use/consume part of the carbon credits within twelve months after the reporting period or within the entity's normal operating cycle, the carbon credits may be split into current/non-current intangible assets based on the expected timing of consumption.

Key takeaways

Assets are to be classified as current when the asset is expected to be realised, used or sold within the entity's normal operating cycle; or primarily held for trading, or expected to be realised within twelve months after the reporting period.

A carbon credit accounted for as inventory is classified as current asset. A carbon credit accounted for as an intangible asset is classified as current / non-current asset based on the expected timing of consumption.

3.6 Considerations for contracts to acquire carbon credits in the future

Entities may enter into contracts/arrangements to acquire carbon credits in the future (i.e. as holders of carbon credits). For such contracts/arrangements, in addition to considering the accounting treatment of the carbon credits, entities will need to consider how to account for other elements/components in the contract/arrangement.

Below are examples of situations and some additional questions to be considered by the entity.

Do note that:
- the list of additional questions is neither exhaustive nor mutually exclusive; and
- detailed assessment in consideration of the specific terms and conditions as well as the entity's facts and circumstances are necessary to determine the appropriate accounting treatment and applicable SFRS(I)s.

Example	Some additional questions to be considered by the entity	SFRS(I) which may be applicable
Entity makes cash advance of $AA and commits to pay $BB for the purchase of CC amount of carbon credits which will be delivered at a future date. The carbon credits are expected to be used to offset the entity's carbon emission liabilities.[35]	- Is the arrangement an executory purchase contract for carbon credits?[36] - Is $AA a prepayment? - For the commitment to pay $BB, is it a forward contract?	SFRS(I) 9 *Financial Instruments*

[35] Paragraph 2.4 of SFRS(I) 9 – Contracts entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements ('own use' exemption).

[36] Executory contract is defined as "a contract, or a portion of a contract, that is equally unperformed – neither party has fulfilled any of its obligations, or both parties have partially fulfilled their obligations to an equal extent" (paragraph 4.56 of The Conceptual Framework for Financial Reporting).

Example	Some additional questions to be considered by the entity	SFRS(I) which may be applicable
Entity commits to purchase DD amount of carbon credits which will be delivered at a future date. The carbon credits are not expected to be used to offset the entity's carbon emission liabilities and the entity intends to sell the carbon credits within a short period after delivery.	- Is the arrangement a derivative?	SFRS(I) 9
Entity provides $EE (in the form of debt or equity) to fund a carbon offset project that provides returns in the form of carbon credits.	- Is $EE a loan or an equity instrument?	SFRS(I) 9
	- Does $EE constitute an interest in subsidiary, joint arrangement or associate? Does the entity (investor) have the ability to direct the relevant activities in the project entity (investee)? • Subsidiary: Is the entity (investor) exposed to variable returns? Can the entity (investor) use its power over the project entity (investee) to affect the amount of its returns? • Joint arrangement: Is the arrangement jointly controlled by multiple parties? Do the parties share interests in the assets related to the arrangement? • Associate: Does the entity (investor) have significant influence over the project entity (investee)?	SFRS(I) 10 *Consolidated Financial Statements* SFRS(I) 11 *Joint Arrangements* SFRS(I) 1-28 *Investments in Associates and Joint Ventures*

An executory contract that is onerous, is within the scope of SFRS(I) 1-37 *Provisions, Contingent Liabilities and Contingent Assets.* In which case, the present obligation under the contract shall be recognised and measured as a provision (paragraph 66 of SFRS(I) 1-37).

Example	Some additional questions to be considered by the entity	SFRS(I) which may be applicable
Entity plants trees to absorb carbon dioxide and generate carbon credits. The carbon credits generated will be held by the entity for own use or for sale. [Note: the entity should consider the guidance set out in this FRB in accounting for the carbon credits generated.]	- Are the trees biological assets related to agricultural activity?[37]	SFRS(I) 1-41 *Agriculture*
	- Are the trees bearer plants related to agricultural activity?[38]	SFRS(I) 1-16 *Property, Plant and Equipment*
Entity enters into a physical power purchase agreement with a windfarm and when the energy is produced, the windfarm will feed the energy produced to the grid and transfer the carbon credits to the entity. [Note: the entity should first unbundle/split the various components for accounting purposes. This process requires significant judgement, as it depends on the facts and circumstances, including terms agreed between the contracting parties.]	- Is there an identified asset in the power purchase agreement? - Does the entity have the right to obtain substantially all of the economic benefits from use of the generating asset throughout the term of the power purchase agreement? - Does the entity have the right to direct how and for what purpose the identified generating asset is used throughout the term of the power purchase agreement?	SFRS(I) 16 *Leases*
	- Does the entity intend to use all of the power purchased under the power purchase agreement? - Are there any derivative/embedded derivatives in the power purchase agreement? - Is the embedded derivative closely related to the host power purchase agreement?	SFRS(I) 9

<u>Key takeaways</u>

There are many possible ways which may result in the acquisition of carbon credits in the future. The appropriate accounting treatment varies depending on factors such as terms and conditions attached to the carbon credits and the entity's facts and circumstances. It is, therefore, imperative for entities to have a full understanding of the carbon credits being transacted by the entity in order to identify the most appropriate accounting standard(s) to apply.

[37] Biological asset is defined as "a living animal or plant" (paragraph 5 of SFRS(I) 1-41).
Agricultural activity is defined as "the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets" (paragraph 5 of SFRS(I) 1-41).

[38] Bearer plant is defined as "a living plant that: (a) is used in the production or supply of agricultural produce; (b) is expected to bear produce for more than one period; and (c) has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales (paragraph 5 of SFRS(I) 1-41).

Appendix A: Relevant regulations on carbon credits in Singapore

(a) Carbon Tax Regime in Singapore

As part of Singapore's climate mitigation efforts to achieve net zero emissions, carbon tax was first introduced on 1 January 2019. The carbon tax is applied to all industrial facilities with an annual direct GHG emissions of at least 25,000 tonne of carbon dioxide equivalent (tCO_2e).

The carbon tax rate was set at S$5 per tonne from 2019 to 2023 to provide a transitional period for companies to adjust to a low-carbon economy. The carbon tax rates will be increased to:

- $25 per tonne in 2024 and 2025
- $45 per tonne in 2026 and 2027
- with a view of reaching $50 to $80 per tonne by 2030.

The National Environment Agency (NEA) is the administrator of Singapore's carbon tax regime.

(b) Use of International Carbon Credits Under the Carbon Tax Regime

The International Carbon Credit (ICC) Framework, introduced in November 2022, allows companies to use high quality ICCs to offset up to 5% of their taxable carbon emissions from 2024. The ICCs used are to adhere to a set of Eligibility Criteria to ensure that they are of high environmental integrity and compliant with Article 6 of the Paris Agreement.[39,40] In December 2023, the Ministry of Sustainability and the Environment (MSE) and the NEA published the Eligibility List of ICCs which companies may use.[41]

(c) Tax Treatment of Carbon Credits

- Goods and Services Tax (GST)[42]

  Before 23 November 2022, GST was chargeable for the issuance, transfer or sale of non-NEA-issued carbon credits (or any digital representation of a carbon credit). These transactions are treated as a taxable supply of services. Carbon credits purchased from overseas exchanges or suppliers fall within the scope of imported digital services, which may be subject to GST under the reverse charge or overseas vendor registration regime.

  From 23 November 2022, GST is not chargeable on the consideration received for the issuance, transfer or sale of any carbon credit (or any digital representation of a carbon credit), including those issued by the NEA. These transactions are treated as neither a supply of goods nor a supply of services (i.e. an excluded transaction). Carbon credits purchased from overseas exchanges or suppliers also fall outside the scope of imported services and are not subject to GST.

[39] Eligibility Criteria for ICCs [link]

[40] Article 6 of the Paris Agreement - Voluntary cooperation/Market- and non-market-based approaches
The Paris Agreement recognises the possibility of voluntary cooperation among Parties to allow for higher ambition and sets out principles – including environmental integrity, transparency and robust accounting – for any cooperation that involves internationally transferal of mitigation outcomes. It establishes a mechanism to contribute to the mitigation of GHG emissions and support sustainable development, and defines a framework for non-market approaches to sustainable development. [link]

[41] Eligibility List of ICCs [link]

[42] IRAS webpage – Carbon Credits [link]

The supply of services relating to carbon credits such as carbon exchange services, brokering services and legal services continue to be standard-rated unless it qualifies to be zero-rated.

Input tax incurred on the purchase of carbon credits which are held for resale on or after 23 November 2022 are not claimable, except for those carbon credits which were purchased before 23 November 2022. Where the carbon credits are for own business use to offset carbon emissions, input tax is claimable if the conditions for claiming input tax are met.

- Direct tax

General income tax principles will apply to determine the taxability of income and deductibility of expenses relating to carbon credits, based on the facts and circumstances of each case.

Taxability of income derived from sale of carbon credits[43]
For a company trading in carbon credits, the related income arising from such trade will be regarded as revenue in nature and is taxable.

For a company which has purchased carbon credits for use in its business, but subsequently sells the credits, the income derived will be considered as part and parcel of the company's business income and hence, taxable.

Deductibility of expenditure incurred on carbon credits[44]
Generally, a company that purchases carbon credits to comply with regulatory obligations will be regarded as having purchased the carbon credits for use in its business. Consequently, the expenditure incurred on carbon credits will be allowable for deduction, subject to the provisions of the Income Tax Act 1947.

[43] IRAS webpage – Taxable & Non-Taxable Income (Is income derived from the sale of carbon credits taxable?) [link]

[44] IRAS webpage – Tax Treatment of Business Expenses (Carbon Credits) [link]

For reference: ISCA Financial Reporting Codification Framework

In November 2019, ISCA issued the ISCA Financial Reporting Codification Framework (Framework). The Framework establishes a formalised categorisation, degrees of authority and a due process for future issuance of ISCA's technical documents. It provides credence to ISCA's technical content, promulgates ISCA's views on the application of accounting standards as well as promotes quality, consistency and best practices in financial reporting.

The Framework is summarised in the table below.

Category	Nature	Degree of authority	Due Process	Highest level of approval
1. Financial Reporting Practice (**FRP**)	Recommended best practices for financial reporting for specific industries, sectors or transactions	Expected to apply	Public consultation required	ISCA Council
2. Financial Reporting Guidance (**FRG**)	Technical guidance, views and insights on specific financial reporting issues for specific industries, sectors or transactions	Expected to follow or explain departures	Public consultation required	ISCA Financial Reporting Committee (FRC), with authority delegated by the ISCA Council
3. Financial Reporting Bulletin (**FRB**)	Technical bulletin containing discussions and highlight of emerging topical financial reporting issues	For information and educational purposes	Public consultation not required	ISCA FRC

For more details on the Framework and the guidance issued under the Framework, please refer to the following:

- Framework [link]
- FRG [link]
- FRB [link]