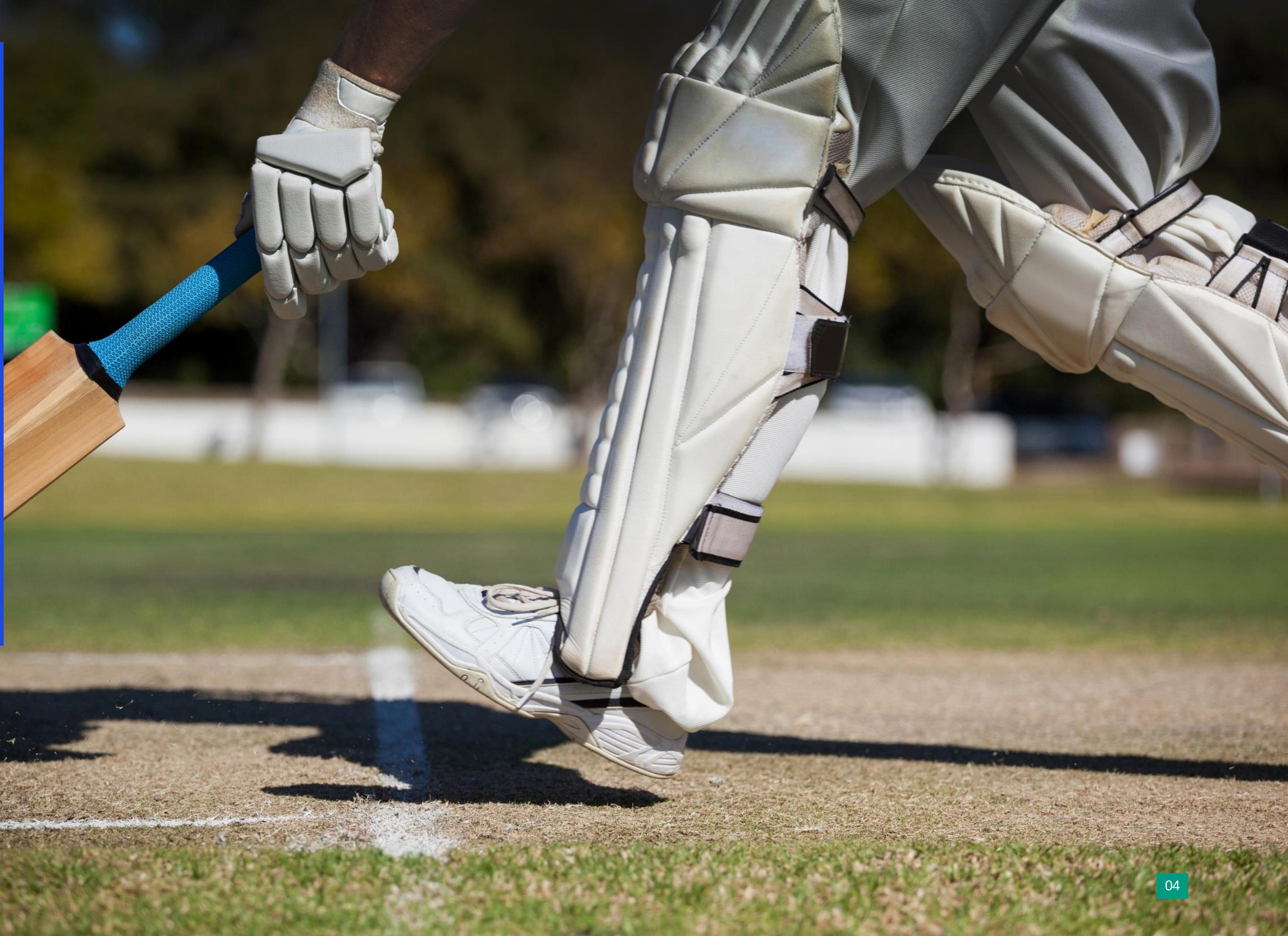
CHAPTER 1

Accounting considerations for carbon credit

This article aims to:

- Provide a brief overview of carbon credit and its accounting implications



Everything we do leaves a carbon footprint such as - from the cars we drive, the food we consume, or the clothes we wear. To achieve a greener economy, governments and corporations around the globe have made commitments to limit global warming and have announced net-zero targets. Net-zero refers to reduction of Greenhouse Gas (GHG) emissions to as close to zero, as much as possible, and offsetting the remaining emissions. In this context, offset means verified removals of carbon (e.g. through growing new forests). Net-zero commitments typically include all value chain emissions as defined in the GHG Protocol. Carbon markets play a significant role to achieve such net-zero commitments.

Carbon markets

Carbon markets generally provide incentive for taking actions to address climate change. Carbon credits generated by the reduction or removal of GHGs from the atmosphere are usually traded by entities. These carbon credits are transferable or tradeable instruments. By purchasing carbon credits, a company can compensate the emissions from its direct and indirect activities to achieve net emissions targets or meet regulatory requirements.

Regulatory framework relating to carbon credits in India

The Energy Conservation Act, 2001 (EC Act) lays down the regulatory framework with respect to efficient use of energy and its conservation. The Act was amended in 2022 to insert new provisions relating to carbon credit. The following diagram depicts the various developments that happened in recent years relating to evolution of carbon market in India.

December 2022

The EC Act was amended to empower Central Government to specify a carbon credit trading scheme.

27 March 2023

The Ministry of Power issued the Draft Carbon Credit Trading Scheme

26 June 2023

The Ministry of Environment, Forest and Climate Change issued the Draft Green Credit Programme Implementation Rules, 2023

28 June 2023

Carbon Credit Trading Scheme, 2023 notified

Following to be notified to operationalise the scheme:

- Formation of the National Steering Committee
- Framework for monitoring, reporting and verification of GHG emissions, and the criteria for issuance of carbon credit certificates including, validity, floor and forbearance price, etc.

12 October 2023

Green Credit Rules, 2023 notified

Following to be notified to operationalise the rules:

- Formation of the Steering Committee
- Methodology and procedure for calculation of generating green credit for each of the environment activities.

(Source: KPMG in India's analysis read with Notification no. 26 issued on 20 December 2022 issued by Ministry of Law and Justice, notification no. S.O. 2825 issued by Ministry of Power on 28 June 2023 and notification no. S.O. 4458 (E). dated 12 October 2023 issued by the Ministry of Environment, Forest and Climate Change)

Amendment to EC Act

The amendment Act introduced changes to Section 14 of the EC Act, which requires Central Government to specify a Carbon Credit Trading Scheme for reduction of carbon emissions. Further, Section 14AA has been added, through this section, the Central Government or any agency authorised by it can issue carbon credit certificate to a registered entity which complies with the requirements of the carbon credit trading scheme. The registered entity would be entitled to purchase or sell the carbon credit certificate in accordance with the Carbon Credit Trading Scheme.

Carbon Credit Trading Scheme 2023

Consequent to notification of carbon market through EC Act and requirement of Carbon Credit Trading Scheme, the central government notified the Carbon Credit Trading Scheme, 2023 (the scheme) on 28 June 2023. As per the Scheme, a carbon credit means a value assigned to a reduction or removal or avoidance of GHG emissions achieved and is equivalent to one ton of carbon dioxide equivalent (tCO_2e). The Scheme requires obligated entities[1] to comply with the GHG emission norms as notified by the Central Government.

Process of issue of certificates: The Scheme requires, obligated entities to achieve GHG emission intensity in accordance with the targets notified by the Ministry of Environment, Forest and Climate Change. The entities should also meet any other targets such as use of non-fossil energy consumption or specific energy consumption notified by the Ministry of Power. For this purpose, carbon credit certificates would be issued to obligated entities for their achievement in reducing the GHG emission intensity exceeding the set target. Whereas those obligated entities who did not achieve their targeted reduction in GHG emission intensity, should meet their shortfall by purchasing carbon credits certificates from Indian carbon market.

To be notified

It is important to note that, the Central Government would constitute a National Steering Committee for Indian carbon market which would govern and directly oversee the functioning of the Indian carbon market.

Further, for operationalising the Indian carbon market, the National Steering Committee and other authorities would frame the detailed procedure with respect to:

- Criteria for issuance of carbon credit certificates,
- Validity of carbon credit certificates,
- Floor and forbearance price of carbon credit certificates,
- Requirement, format and timeline for submissions,
- Monitoring, reporting and verification and
- Any other related and incidental matters.

1. The Scheme defines obligated entities as ‘registered entities’ that are notified under the compliance mechanism of the Scheme and non-obligated entities as ‘registered entities’ that can purchase the carbon credit certificates on voluntary basis. As per EC Act, a registered entity means any entity, including designated consumers, registered for carbon credit trading scheme.

Green Credit Rules, 2023

On 12 October 2023, the Ministry of Environment, Forest and Climate Change issued the Green Credit Rules, 2023. The main objective of this programme is to incentivise environmental positive actions through market-based mechanism and generate green credit, which would be tradable and made available for trading on a domestic market platform. The green credit would arise by undertaking any of the following environment activities:

i. Tree plantation: to promote activities for increasing the green cover across the country

ii. Water management: To promote water conservation, water harvesting and water use efficiency or water savings, including treatment and reuse of wastewater

iii. Sustainable agriculture: To promote natural and regenerative agricultural practices and land restoration to improve productivity, soil health and nutritional value of food produced

iv. Waste management: To promote circularity, sustainable and improved practices for waste management, including collection, segregation, and environmentally sound management

v. Air pollution reduction: To promote measures for reducing air pollution and other pollution abatement activities

vi. Mangrove conservation and restoration: to promote measures for conservation and restoration of mangroves

vii. Ecomark label development: To encourage manufacturers to obtain ecomark label for their goods and services

viii. Sustainable building and infrastructure: To encourage the construction of sustainable buildings and other infrastructure using environment friendly technologies and materials.

It is important to note that, the green credit programme is an environmental activity resulting in generation of green credit which could have climate co-benefits, such as reduction or removal of carbon emissions. However, it is independent of the carbon credit under the Carbon Credit Trading Scheme, 2023.

To be notified

The Central Government would constitute a Steering Committee for monitoring the implementation of the Green Credit programme.

Further the Central Government would also set up a technical committee for each activity to assist in the implementation of the Green Credit programme.

The methodology and procedure for calculation of generating green credit for each of the abovementioned environment activities and the trading platform are yet to be developed. In this regard, on 23 October 2023, the Ministry of Environment, Forest and Climate Change notified the draft methodology for water harvesting.

Accounting and recognition considerations

The accounting for carbon credits and its offsets[2] is an emerging issue. Currently, there is no specific guidance under Ind AS or IFRS Accounting Standards on accounting for such carbon credits. Internationally companies are using certain accounting principles under IFRS for accounting of carbon credits.

The following section provides an overview of the accounting framework companies are adopting internationally under IFRS. However, in the absence of the specific guidance, companies are expected to consider the specific facts and circumstances, nature of the arrangement and the business purpose for purchasing the credits to select the appropriate accounting treatment as per the IFRS.

Further, the principles for accounting and recognition of carbon credit are different for an acquirer of carbon credits i.e. company that purchases carbon credits and a vendor of carbon credits (where a company incorporates carbon credits into revenue arrangements). The below discussed accounting framework is bifurcated between the acquirer's perspective and vendor perspective for accounting and recognition of carbon credit.

Acquirer's perspective: company purchases carbon credits

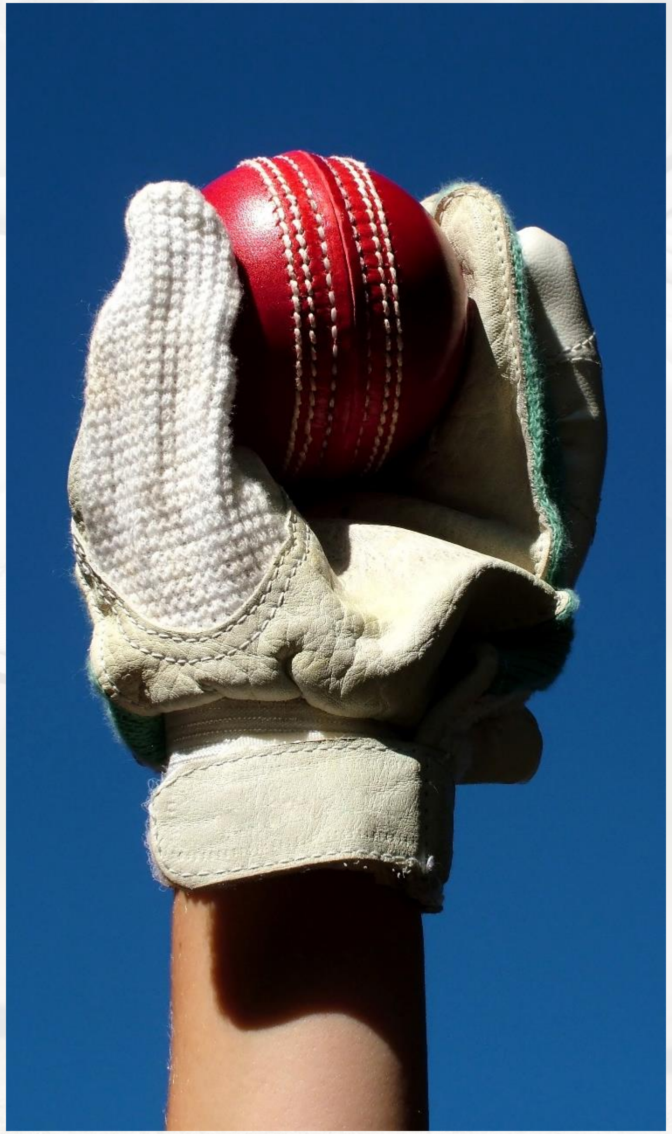
A company aiming to reduce its carbon emissions may opt for mandatory 'cap and trade' scheme introduced by a government - or may reduce the impact of its carbon emissions voluntarily - e.g. by purchasing carbon credits or offsetting services. The distinction between the two is as follows:

a. **Mandatory/compliance schemes (i.e Cap and trade schemes):** The mandatory schemes are driven by regulatory bodies and the participants are identified by governments based on carbon intensity, sector or size. Under such scheme, an entity would be subject to specific requirements to reduce its carbon emissions.

   When a company reduces its emissions, the government would grant certain number of emissions certificates to an entity which it could use during its compliance period. The entity can then trade certificates with other parties to ensure that it has sufficient certificates to match its emissions.

Accounting consideration

In such schemes, the emission allowance could be recognised as a government grants as per the principles of IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance.* IAS 20 provides that such non-monetary government grant at initial recognition would be recognised either at fair value or at a nominal amount. Recognition of a non-monetary government grant at the amount paid (often zero) would result in no liability being recognised if the liability is measured at the carrying amount (zero) of the related assets. As per IAS 20, fair value is the usual approach for non-monetary grants.



2. Offset means verified removals of carbon (e.g. through growing new forests).

For subsequent measurement, depending upon the classification of emission certificates a participant should choose an accounting policy, to be applied consistently, based on one of the following approaches:

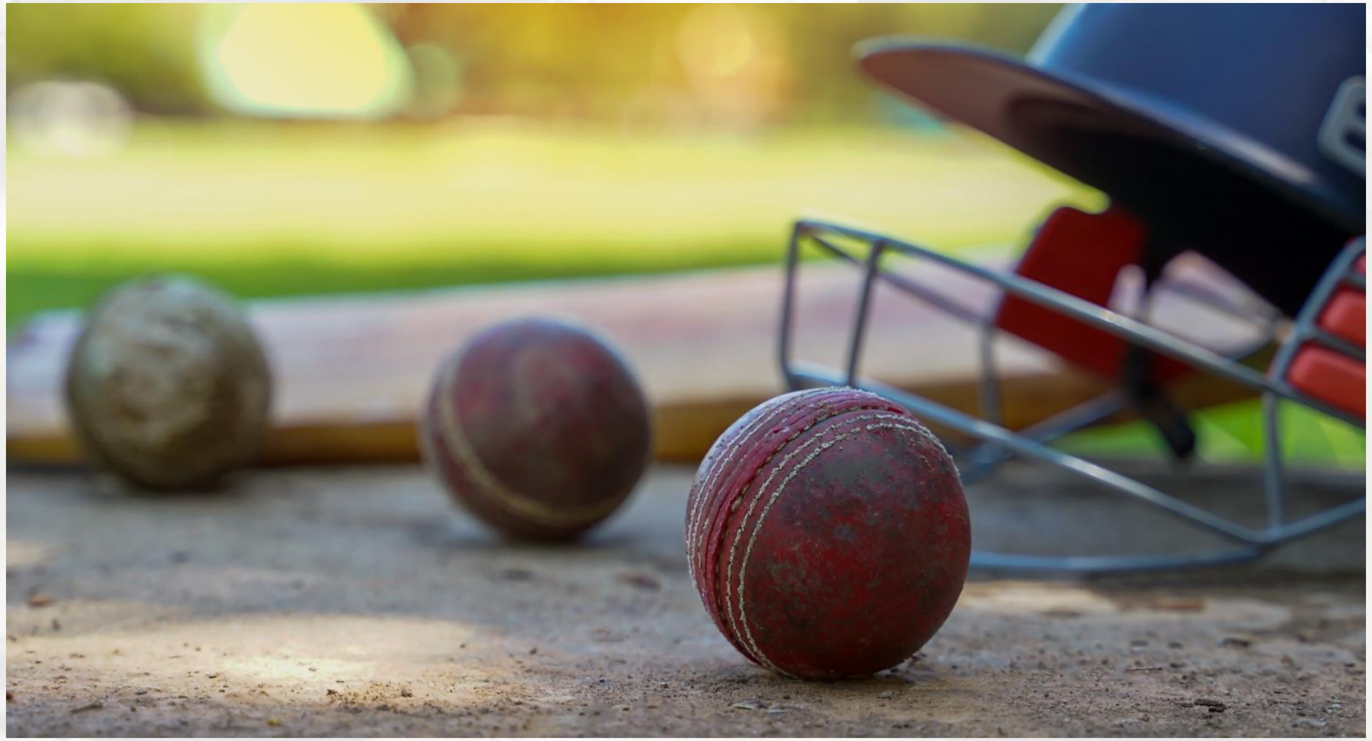
- To be classified as intangible assets as per IAS 38, *Intangible Asset:* Under this approach, emissions certificates are identifiable non-monetary assets that do not have physical substance and thus they meet the definition of an intangible asset.
- To be classified as inventories as per IAS 2, *Inventories:* Under this approach, emissions certificates are effectively an input to be consumed in the production process, similar to inventories.

b. **Voluntary schemes:** An entity may voluntarily purchase carbon credits representing a reduction or removal of emissions e.g. a certified offsetting project such as planting of trees. Under this scheme, credits are often registered with a registry authority and an entity could trade or sell them to a third party.

As the arrangements could vary, the specific facts and circumstances applicable to the entity should be considered to determine the appropriate accounting treatment.

An entity may consider following factors for evaluation:

- **Credit purchased together with other goods or services:** In such a scenario, management should determine if the credit is part of the cost of another good or service or if it is a separate unit of account. If it is part of the cost of another good or service, then it is not accounted for separately.
- **Credit is purchased for advertising or promotional activities:** A company recognises expenditure for advertising and promotional activities when the benefit of those goods or services is available to it. However, it has been observed that credits are typically not acquired with the sole purpose of undertaking advertising or promotional activities.
- **Credit purchased for selling or to fulfil contracts with customers:** If the credit is purchased with the intention of selling it in the ordinary course of business or the credit is purchased to fulfil contracts with customers, then the credit is accounted as inventory under IAS 2. In other words, carbon credits would meet the definition of inventories if they are held for sale in the ordinary course of business or consumed in the production process. Additionally, the disclosure requirements of IAS 2 should also be considered.



- **Credit held for use:** The company's ability to use the carbon credit to offset its own emissions generally represents economic benefits flowing to the company from the credit. If economic benefits arise from the ability to offset, then the company may have an intangible asset as per IAS 38. This is because it has the power to obtain the future economic benefits and restrict others' access to those benefits.

  The management of the company would be required to exercise judgement to determine when the economic benefits from the carbon credits are consumed. For example, if the economic benefits are of the ability to offset, then they are typically consumed when the company retires the credits – i.e. the credits are derecognised when they are retired. Similarly, if the credits are retired immediately on purchase, then the economic benefits are consumed immediately and the expenditure is recognised as an expense.

Vendor's perspective: company incorporates carbon credits into revenue arrangements

Carbon credits could be incorporated into a revenue contract by transferring them to a customer when they purchase a green widget (i.e. an attribute of the asset) or by retiring carbon credits on customer's behalf. In order to recognise revenue as per IFRS 15, *Revenue from Contracts with Customers,* the company should have a separate performance obligation related to the carbon credit. In such scenarios, the company should allocate a portion of the transaction price to the carbon credits or related service (assuming control does not transfer at the same time) and recognise revenue when the performance obligation is satisfied. There may also be an impact on revenue recognition disclosures (e.g. disaggregation of revenue).

Bottom Line

As corporates are announcing their commitments to reduce their carbon emissions, there has been an increase in demand relating to corporate sustainability disclosures and demonstrate progress towards net zero commitments. Considering this the regulators around the globe are working on developing requirements relating to the same. This is an emerging area, and the scope of formal regulation is increasing.

The recently released IFRS Sustainability Disclosure Standards and European Sustainability Reporting Standards (ESRS) also provide disclosure requirements relating to carbon credits. Therefore, it is important to track regulatory announcements in this area. Also, as there is no specific accounting guidance it is critical to understand the substance of an arrangement to apply and determine the appropriate accounting standards.

Sources

- Insights into IFRS publication, KPMG IFRG Limited, 2023 edition
- Carbon offsets and credits under IFRS Accounting Standards article, KPMG LLP US, March 2023