Carbon Accounting and Carbon Credits in the Financial Statements

Carbon accounting is the systematic process of measuring, tracking, and reporting greenhouse gas (GHG) emissions associated with an organization's activities. It translates complex operational data such as fuel consumption, electricity use, and supply chain activities into a standardized metric known as carbon dioxide equivalent (CO_2e). This enables companies to understand their environmental impact, set reduction targets, and communicate performance transparently to regulators, investors, and stakeholders. As Malaysia embarks on its journey to implement the National Carbon Market Policy, greater focus will be directed towards carbon accounting as carbon credits will require measurement in order to be traded.

The most widely used framework for carbon accounting is the Greenhouse Gas (GHG) Protocol, which categorizes emissions into three scopes:

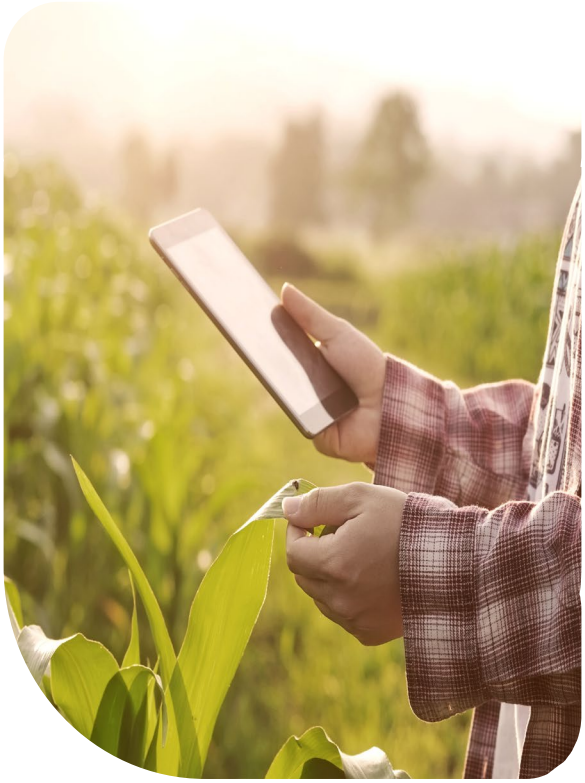
a) Scope 1 includes direct emissions from owned sources, such as fuel burned in company vehicles or generators.

b) Scope 2 covers indirect emissions from purchased electricity and energy.

c) Scope 3 includes all other indirect emissions across the value chain, such as supplier activities, employee commuting, and waste disposal.

In practice, Scope 3 is often the most significant category, frequently accounting for 70% of a company's total emissions in many industries. It is also one of the most difficult to measure, hence organisations often rely on estimates and supplier surveys. Some companies exclude reporting Scope 3 which can significantly understate their true environmental impact.

To sum it up, these three scopes provide a comprehensive view of an organization's carbon footprint.



The 3 scopes in action

To illustrate, consider a simplified example of a manufacturing company in Malaysia.

The company tracks its annual fuel use, electricity consumption, and supply chain activities. It finds that burning diesel and petrol for generators and vehicles emits about 38 tonnes of CO_2e (Scope 1).

Electricity usage contributes 290 tonnes (Scope 2), reflecting the carbon intensity of the national grid.

Additionally, indirect activities such as raw material sourcing, employee commuting, and waste disposal generate another 210 tonnes (Scope 3). In total, the company's annual carbon footprint amounts to approximately 538 tonnes of CO_2e. This quantified baseline is the foundation for decision-making.

With this information, the company can implement reduction strategies. For instance, installing solar panels may significantly reduce Scope 2 emissions, while transitioning to electric vehicles lowers Scope 1 emissions. Improving supplier practices or using recycled materials can reduce Scope 3 emissions. Suppose these initiatives reduce emissions by around 165 tonnes, leaving a residual footprint of 373 tonnes CO_2e. This is where carbon markets become relevant.

Carbon markets provide mechanisms to put a price on emissions and incentivize reductions.

1. In compliance markets, such as emissions trading schemes, companies must hold allowances equivalent to their emissions; accurate carbon accounting is essential to determine compliance obligations.
2. In voluntary carbon markets, organizations can purchase carbon credits to offset their remaining emissions. Each credit represents one tonne of CO_2e reduced or removed elsewhere, such as through reforestation or renewable energy projects.

Returning to the example, the company could purchase 373 carbon credits to offset its remaining emissions. If each credit costs $10, the total offset cost would be $3,730. Combined with its internal reduction efforts, the company could credibly claim carbon neutrality—provided the credits are verified and reporting is transparent. This demonstrates how carbon accounting directly feeds into market-based climate action.

Accounting Treatment of Carbon Credits

Carbon credits may be recognised in different ways in the statement of financial position, depending on the entity's purpose.

1. When held for use as emissions offsets, carbon credits are generally recognised as intangible assets because they represent a contractual right or future economic benefit rather than a physical asset.
2. However, entities that actively trade carbon credits may classify them as inventory, depending on the nature of their operations.
3. Purchased carbon credits are typically recorded at cost on initial recognition. Where carbon credits are generated internally and held for sale, they may be recognised and measured in accordance with the applicable accounting requirements, including inventory accounting where appropriate.
4. Subsequent measurement depends on the accounting policy adopted and the relevant accounting standards.
5. When carbon credits are surrendered to offset emissions, their carrying amount is recognised as an expense, typically as part of environmental, compliance, or operating costs.
6. Gains or losses may also arise from the sale of carbon credits or from changes in their valuation where remeasurement is required or permitted.

Appropriate financial statement disclosures are important and should include information on:

- the nature of carbon credit holdings,
- valuation methodologies,
- key assumptions,
- associated risks,
- and, the entity's sustainability or emissions reduction commitments.

Such disclosures enhance transparency for investors, regulators, and other stakeholders. A significant challenge in accounting for carbon credits is the absence of a dedicated IFRS standard that specifically addresses their recognition and measurement. Consequently, entities must exercise considerable judgement in applying existing IFRS requirements.

Carbon accounting and carbon markets are deeply interconnected.

Carbon accounting provides the measurement and transparency needed to understand emissions.

Carbon markets create financial incentives to reduce or offset them.

Together, they form a critical framework for driving organizations toward a low-carbon future. If you have any concerns or need support regarding this topic, Grant Thornton Malaysia can support with assuring your sustainability report, including the treatment of carbon credits in the financial statements.

Should your organisation be interested in addressing the complexities of these changes, do reach out us to find out how we can help you tackle challenges and take advantage of new opportunities.

Contact us to discuss how we can help with our Sustainability and Climate Change Services

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