Revenue Recognition for Carbon Credits

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BACKGROUND

Overview

The increasing focus on companies' environmental, social, and governance and net-zero commitments has created demand for carbon credits generated by voluntary schemes designed to drive "greener" behaviour. These carbon credits are meant to certify that a company has reduced or removed a specific amount of greenhouse gas (GHG) emissions from the atmosphere through its activities.

At its May 2023 and September 2023 meetings, the Group discussed the accounting for the development of carbon credits. The Group noted that this is a rapidly emerging area and recommended discussing similar issues in the future. Accordingly, the Group discussed revenue recognition for the sale of carbon credits by applying the guidance in IFRS 15 Revenue from Contracts with Customers. The discussion focused on one fact pattern in which the seller is required to make a long-term commitment with a carbon registry to ensure the permanence of carbon stocks. The carbon registry establishes this requirement as a condition of certifying the credits. Under different fact patterns, separate and additional accounting considerations may arise.

What is a carbon credit?

A carbon credit under a voluntary scheme is a transferrable instrument certified by an independent certification body (typically a carbon registry) to represent an emission reduction of one metric tonne of carbon dioxide, or an equivalent amount of other GHGs. An entity can purchase a carbon credit and "retire" it to claim the underlying emissions reduction toward its own GHG emissions reduction goals.

How do carbon registries work?

Voluntary carbon registries typically operate an online system for members to register projects and record the issuance, transfer, and retirement of serialized, project-based, and independently verified credits, outside of a regulatory regime. The registry is not an exchange, and it does not facilitate or enter into carbon credit sales between parties. Rather, transactions are negotiated directly between buyers and sellers, and these take place outside of the registry. After a transaction takes place, the counterparties record the transfer of ownership or retirement of credits on the registry using the unique serial numbers assigned to each credit. There may be many customers for a particular project or tranche of credits within a project. Any issues or disputes that may arise between project developers and third parties are independent of the registry.

Each registry develops its own standards and methodologies for quantifying, monitoring, and reporting project-based GHG emissions reductions and removals, verification, project registration, and issuance of carbon credits. These standards establish the quality level every project must meet to be able to list credits on the registry. Project developers must agree to the terms and conditions outlined by the registry. Voluntary carbon registries are often non-profit in nature and project developers pay fees to support the operation of the registry.

Why are carbon registries important?

Listing on an established carbon registry is generally required to effect meaningful voluntary carbon credit sales. This is because potential purchasers require certification that GHG emissions have truly been reduced or removed. Carbon credits are generally required to be issued, or to be very close to being issued, before sales transactions can take place. "Pre-sales" are possible but are contingent on successful issuance. Conversely, issuance of carbon credits on a registry does not guarantee sales.

Eligible projects are long-term endeavours. The chosen methodology will determine:

- the minimum period for which a project developer commits to project monitoring and verification ("Minimum Project Term"); and
- the period during which the project activities are eligible to generate carbon credits ("Crediting Period"). During the Crediting Period, a new tranche of credits is verified and issued by the registry periodically (e.g., annually).

Fact Pattern

A Company owns and manages forests for the primary purpose of harvesting trees for timber. The Company determined that by reducing its harvest levels by 10 per cent, it could develop carbon credits and sell them in the voluntary market for a greater return than the foregone amount of harvested timber. The Company therefore developed a project to reduce harvest levels on designated lands to generate carbon credits. The Company will also continue some harvesting activities on these lands.

The project has been verified and registered on a voluntary registry. The Minimum Project Term is 40 years, and the Crediting Period is the first 10 years. This means that the Company must maintain the carbon-stocking level associated with verified and issued carbon credits for 40 years by limiting its harvesting activities. This ensures a level of "permanence" for the related carbon stocks. Per the terms and conditions agreed to with the registry, the Company is responsible for the following activities over the 40-year term (the "Long-Term Commitments"):

- annual reporting of estimated carbon stocks and known harvests or disturbances;
- periodic physical site verification by an accredited verifier;
- periodic re-inventorying activities; and
- repayment of carbon credits "reversed" due to harvesting. This can be done by cancelling/retiring an equivalent volume of unsold credits in its registry account or by purchasing other credits that are then immediately cancelled/retired. The Company is not liable for

reversals due to natural events beyond its control. Those are covered from a pooled buffer (insurance) account, which is funded through the registration process.

The costs associated with reporting, verifications, and re-inventorying activities are immaterial to the Company.

The first tranche of carbon credits has been issued and is now available for sale. They are recorded as inventory in the Company's financial statements. They will be purchased by third-party companies who can resell or retire them. Each sale is subject to a separately negotiated contract between the Company and the customer. The sales price is fixed once agreed with the customer. Upon sale, the credit is transferred to the customer and payment is due immediately.

There are no further obligations outlined in the contract with the customer beyond the transfer of a specific serialized carbon credit in exchange for cash consideration. There are no further carbon capture requirements associated with that credit, and there is no further reporting to the customer. Any reversal of carbon credits sold does not impact the customer who purchased the credits.

The following assumptions and considerations are relevant to the analysis:

- The sales of the carbon credits are material to the Company and are an output of the Company's ordinary activities in exchange for consideration in the scope of IFRS 15 (paragraph 6 of IFRS 15). Therefore, the analysis follows the five-step revenue recognition model under IFRS 15.
- The third parties purchasing the carbon credits from the Company are considered customers since they are the "party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration" (paragraph 6 of IFRS 15).
- This analysis focuses on the accounting for the sale of the carbon credits and does not address the accounting for the related costs associated with the sale.

Step 1: Identifying the Contract with the Customer

Analysis

Paragraph 9 of IFRS 15 indicates that:

An entity shall account for a contract with a customer that is within the scope of this Standard only when all of the following criteria are met:

(a) the parties to the contract have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations;

(b) the entity can identify each party's rights regarding the goods or services to be transferred;

(c) the entity can identify the payment terms for the goods or services to be transferred;

(d) the contract has commercial substance (ie the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract); and

(e) it is probable that the entity will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer.…

The contracts between the Company and the third-party purchasers of the carbon credits are in the scope of IFRS 15 because they satisfy all the criteria listed above. The contracts create enforceable rights and obligations regarding the sale of carbon credits by the Company to the third-party purchasers.

The Group's Discussion

The Group agreed with the analysis.

Step 2: Identifying Performance Obligations

Analysis

Performance obligations are the unit of account for the purposes of applying IFRS 15. They are identified at contract inception and form the basis for how and when revenue is recognized. In accordance with paragraph 22 of IFRS 15, an entity shall identify as a performance obligation each promise to transfer to the customer either:

(a) a good or service (or a bundle of goods or services) that is distinct; or

(b) a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

Per paragraph 24 of IFRS 15, identifying performance obligations involves assessing customer expectations that may go beyond explicit promises in the contract. That is, they may include implied promises based on customary business practices, published policies, or specific statements that create valid expectations that the entity will deliver a good or service.

Once the various promises are identified, the Company would assess whether the related goods or services transferred are distinct. If they are distinct, that means they are separate performance obligations under paragraph 22(a) of IFRS 15. Per paragraph 27 of IFRS 15, they are distinct if both of the following criteria are met:

(a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (ie the good or service is capable of being distinct); and

(b) the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (ie the promise to transfer the good or service is distinct within the context of the contract).

Four views have been identified for this step of the revenue recognition model.

View 2A – *Performance obligation corresponds only to the sale of carbon credits*

The customer purchases carbon credits that are certified at the time of the transaction. Proponents of this view note that subsequent actions of the seller do not impact the customer's ability to retire the carbon credits. If the Company defaults on its Long-Term Commitments (e.g., by overharvesting), it would need to take action with the registry (i.e., retire unsold credits or purchase and retire other credits). Such actions would be separate transactions from the sale of the original carbon credits. The original carbon credits would not lose their value, and the customer would not be entitled to any refund. The Long-Term Commitments represent an obligation from the Company to the registry to obtain and maintain accreditation for the project and not an obligation to the customer.

View 2B – *Performance obligation corresponds to the sale of carbon credits AND the Long-Term Commitments*

Proponents of this view note that the customer purchases carbon credits because they have been certified by an independent party (the registry). The carbon credits have value because the Company has made an implicit promise to the customer to fulfill the Long-Term Commitments. Proponents of this view think these terms do not need to be specified in the sales contract since the value of the carbon credits is negotiated between the Company and the customer in the context of the accredited program. Without the Long-Term Commitments from the Company and the ongoing monitoring from the registry, the program is less valuable. As such, proponents of this view think the promises associated with the Long-Term Commitments cannot be considered distinct from the sale of the carbon credits. The fact that there are substantive consequences to the Company if it defaults on its Long-Term Commitments supports the presence of a promise made to the customer, even if the customer is not entitled to a refund.

View 2C – *Distinct performance obligations for the sale of carbon credits AND the Long-Term Commitments*

Proponents of this view think there are distinct performance obligations for the sale of carbon credits and the Long-Term Commitments, as they think the customer can benefit separately from each. That is:

- the customer can retire the carbon credits independently from the Company's compliance with its Long-Term Commitments; and
- the Long-Term Commitments represent a type of service in addition to the assurance that the carbon credits comply with the program terms when sold to the customer (meaning they can ultimately be retired by the customer).

Proponents of this view note that this is similar to the analysis of warranties under paragraphs B28-B33 of IFRS 15. Paragraph B31 of IFRS 15 discusses factors that may indicate that a warranty is a performance obligation, including the length of the warranty coverage period and nature of the tasks the entity promises to perform. Considering those factors:

- The Company has a commitment spanning several years and there are specific actions it must undertake to satisfy its Long-Term Commitments (e.g., ongoing surveying and verification).
- Customers purchased the carbon credits with the expectation that the Company will meet its Long-Term Commitments, even if this does not impact their ability to retire the carbon credits.

View 2D – *Development of an accounting policy based on facts and circumstances*

Proponents of this view think Views 2A, 2B, and 2C all have merit. Therefore, depending on the facts and circumstances, the Company should apply judgment to determine which method best reflects the economics of the transaction. This may require disclosing this accounting policy in accordance with paragraph 122 of IAS 1 *Presentation of Financial Statements* if it is material.

The Group's Discussion

The Group agreed with the analysis of factors an entity might consider when identifying performance obligations. Most Group members agreed with View 2A. Some Group members thought View 2B also had merit. No Group members agreed with View 2C, as they thought the Long-Term Commitments were not a separate performance obligation.

Group members who agreed with View 2A highlighted that the Company's engagement with the customer ends after the carbon credits are sold. They noted that in this fact pattern, there would be no impact to the customer if the Company were to default on its Long-Term Commitments. They commented that any resulting obligations from defaulting would not bear on the sale of the carbon credits insofar as the credits relate to past carbon capture. A few Group members also indicated that the customer could control and benefit separately from the carbon credits but not from the Long-Term Commitments.

In supporting View 2A, various Group members drew analogies to explain why there may not be a performance obligation corresponding to the Long-Term Commitments:

- Meeting long-term debt covenants or government grant conditions are generally not considered performance obligations to customers. Rather, entities need to meet these in order to maintain funding for business activities. Similarly, complying with the Long-Term Commitments may not be considered a performance obligation because the Company would need to comply with these as part of the terms and conditions for listing carbon credits on the registry.
- Customers may purchase a product because it is made locally. However, the seller would not have a performance obligation associated with continuing to produce locally. If the seller moves its production overseas, that does not change the original item the customer purchased. Similarly, there would be no performance obligation corresponding to the Long-Term Commitments.

Some Group members also noted that if the Company were to default on its Long-Term Commitments, it may have a different type of obligation to be separately accounted for in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets. This obligation would be to the registry rather than to the customer. One Group member commented that this likely would not qualify as a warranty-type performance obligation under IFRS 15 because such warranties represent obligations to customers rather than to registries or other such bodies. They also noted in accordance with paragraph B33 of IFRS 15, obligations associated with breaching product liability laws would be accounted for in accordance with IAS 37 rather than as performance obligations under IFRS 15. Considering the analogies above, this guidance on product liability laws could be applied to the Long-Term Commitments. The AcSB Chair commented that in assessing the treatment under IAS 37, there may be relevant considerations in the IFRS Interpretations Committee's Tentative Agenda Decision, *Climate-related Commitments (IAS 37)*.

Some Group members who agreed with View 2A thought View 2B also had merit. A couple Group members commented that they would support View 2A if the carbon credits related purely to past carbon capture, but considered if there may be elements of future carbon capture in this fact pattern. The Group emphasized that the facts and overall environment would need to be fully understood in order to determine the appropriate accounting treatment. Two Group members noted the importance of long-term carbon storage in this particular fact pattern, and accordingly favoured View 2B over View 2A. One Group member noted that the customer would likely perform significant due diligence before purchasing the credits, as this is a voluntary scheme, and the customer would want to make sure it can use the credits to meet its GHG emissions reduction goals. A few Group members considered what would happen if, after the customer retired the credits, the Company were to harvest the trees that were meant to store the carbon associated with the retired credits for 40 years. In this case, the customer may be under pressure to take some form of action in order to still be able to meet its GHG emissions reduction goals. This could include purchasing more carbon credits or possibly pursuing legal action against the Company. The Group members thought that the carbon credits would be less valuable to the customer in this case. Some Group members thought that this would be a separate issue from revenue recognition (e.g., impairment).

Group members emphasized that there would not be an accounting policy choice. Rather, the facts and circumstances of the transaction would drive the accounting treatment. In establishing an accounting policy for these transactions, it will be important to understand whether the promise to the customer relates to past carbon capture, future carbon capture, or a combination thereof.

Step 3: Determining the Transaction Price

Analysis

Per paragraph 47 of IFRS 15, the transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. It may include both fixed and variable amounts. In this fact pattern, there is no variability associated with the transaction price. The consideration is fixed once the sales price has been agreed to between the Company and customer. There are no significant financing components since payment is due upon sale. Therefore, the transaction price is the sales price per the contract.

The Group's Discussion

The Group agreed with the analysis.

Step 4: Allocating the Transaction Price to the Performance Obligations

Analysis

Step 4 builds on the conclusions in Steps 2 and 3. Under Views 2A and 2B, there is no allocation to perform because there is a single performance obligation. Under View 2C, the transaction price from Step 3 would be allocated to the two performance obligations (being the sale of the carbon credits and the Long-Term Commitments). Their stand-alone selling prices are not directly observable since the total transaction price covers both and the Company does not regularly sell one without the other. Therefore, these would need to be estimated in accordance with paragraph 78 of IFRS 15, considering all information reasonably available and maximizing the use of observable inputs.

Paragraph 79 of IFRS 15 indicates that suitable allocation methods include, but are not limited to the:

(a) adjusted market assessment approach;

(b) expected cost plus a margin approach; and

(c) residual approach, in limited circumstances.

View 4A – *Relative fair value allocation between the two performance obligations*

Per paragraph 73 of IFRS 15:

The objective when allocating the transaction price is for an entity to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

Proponents of this view think that a relative fair value allocation would best meet that objective, for example, using a market assessment approach. Under this approach, the Company would consider the price a customer would pay for the carbon credits and the Long-Term Commitments separately. Since the stand-alone selling price of the Long-Term Commitments might not be directly observable, the Company may need to estimate it based on observable inputs from similar transactions in voluntary markets.

View 4B – *Nominal value assigned to the Long-Term Commitments*

Proponents of this view think the allocation objective in paragraph 73 of IFRS 15 would be met by allocating a nominal value to the Long-Term Commitments under the expected cost plus a margin approach. This is because the costs associated with reporting, verifications, and re-inventorying activities are immaterial to the Company. The outcome would be similar under the residual approach, though further analysis would be required to determine if the residual approach could be used based on the criteria in paragraph 79(c) of IFRS 15.

The Group's Discussion

The Group agreed with the analysis of factors to consider when allocating the transaction price to the performance obligations. This analysis would only be relevant when there are multiple performance obligations – that is, only when View 2C is taken in Step 2. **However, no Group members supported View 2C**. For purposes of the discussion, Group members discussed what their views would be in Step 4 had they taken View 2C in Step 2.

A few Group members favoured View 4A, as they thought there would be a significant commitment/cost associated with the Long-Term Commitments. One Group member noted that even if the costs of reporting, verification, and re-inventorying activities are immaterial, the value of the Long-Term Commitments may not be nominal because there would be a significant opportunity cost associated with not harvesting the trees for 40 years.

One Group member favoured View 4B. They thought it would be difficult to determine a stand-alone selling price for the Long-Term Commitments because customers may not pay for these separately.

Step 5: Recognizing Revenue

Analysis

In accordance with paragraph 31 of IFRS 15, revenue will be recognized when (or as) the performance obligations are satisfied by transferring control of a promised good or service to the customer. Thus, Step 5 depends on the conclusions in Step 2.

Per paragraph 32 of IFRS 15, control can transfer at a point in time or over time.

View 5A – *Point-in-time revenue recognition for the sale of the carbon credits*

This view is applicable under Views 2A and 2C in Step 2. Proponents of this view think the criteria in paragraph 35 of IFRS 15 for recognizing revenue over time are not met. Control of the carbon credits passes from the Company once the sales contract is concluded with the customer. At that point:

(a) the Company has a right to payment;

(b) the customer has legal title to the carbon credits (as evidenced by the change in ownership recorded in the registry); and

(c) the customer has the significant risks and rewards of ownership, including the unrestricted ability to retire the carbon credits when they choose.

View 5B – *Over time revenue recognition for the sale of the carbon credits (when combined with the Long-Term Commitments) and for the Long-Term Commitments (when distinct)*

This view is applicable under Views 2B and 2C in Step 2. Proponents of this view think that customers consume the benefits associated with the Long-Term Commitments as the Company restricts its harvesting activities over the Minimum Project Term (i.e., 40 years). This is consistent with revenue recognition patterns for the provision of services. A deferred revenue would be established, and revenue would be recognized over the Long-Term Commitments period.

View 5C – *Point-in-time revenue recognition for the sale of the carbon credits and the Long-Term Commitments*

Proponents of this view think that the Long-Term Commitments to avoid harvesting above specific levels is not viewed as a continuous service provided by the Company to the customer. This is due to the Company's commitment to inaction during this period. Furthermore, the costs associated with reporting, verifications, and re-inventorying activities are immaterial to the Company. Proponents of this view also note that the customer receives the benefit from the Company's carbon emissions reduction activity upfront when it transfers the carbon credit to them. Since the Company does not transfer control of a service over time to its customers, paragraph 35 of IFRS 15 does not apply. Therefore, the Company would apply paragraph 38 of IFRS 15 and recognize revenue for the Long-Term Commitments and carbon credits when the carbon credits are transferred to the customer. The outcome of this view is similar to the outcome under View 5A.

The Group's Discussion

Group members agreed with the analysis of factors to consider when recognizing revenue in Step 5.

A few Group members who supported View 2A in Step 2 noted that they agreed with View 5A. Two of the Group members indicated that they agreed with View 5A because the carbon credits relate purely to past carbon capture and could be retired immediately. However, one Group member commented that if the carbon credits contained an inherent promise for future carbon capture, it may not be appropriate to recognize revenue until that carbon capture occurs. To determine the appropriate revenue recognition in such a case, it would be important to understand when the customer could retire the credits (e.g., over time or only when all the carbon capture is complete).

One Group member saw merit in View 5B if View 2B were taken in Step 2. Under View 2B, there is a single performance obligation corresponding to the sale of carbon credits and the Long-Term Commitments together. This Group member noted that if these elements are viewed to be so connected that they cannot be considered distinct, then it may be appropriate to recognize revenue over time as customers consume the benefits of both elements. They thought that View 5C would be difficult to support because the Company has Long-Term Commitments to meet over the 40-year term.

Overall, the Group's discussion raised awareness of how an entity recognizes revenue for the sale of carbon credits by applying IFRS 15. This is a rapidly emerging area, which the Group will continue to monitor. The Group may discuss similar issues in the future as other fact patterns emerge.