



# Global & Canadian Use of Voluntary Carbon Credits and the Related Financial Accounting and Disclosure Considerations

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# Executive summary

Voluntary carbon markets (VCMs) have the potential to advance climate action by providing an avenue for organizations to offset their hard-to-abate greenhouse gas (GHG) emissions to meet their targets. However, VCMs face ongoing challenges and controversies that undermine their credibility and effectiveness.

This report, the second in the [series](#) aimed at providing an understanding of carbon credit markets and the related challenges, analyzes the use of voluntary carbon credits by corporate buyers, focusing on Canadian practices and global comparisons. It also reviews the related financial accounting and disclosure implications of using voluntary carbon credits toward decarbonization targets.

## *Key findings regarding the use of voluntary carbon credits*

- 51 of the 58 largest public companies in Canada have set GHG emission reduction targets. Only 13 disclosed project-level details about the carbon credits they purchased towards meeting their targets between 2020 and 2022.
- Among the 13 Canadian corporate buyers, financial services (0.53 million credits) and software (0.29 million credits) sectors accounted for 95 per cent of the total disclosed carbon credit purchases between 2020 and 2022. In comparison, the global purchases were led by fossil fuels, manufacturing, services and transportation.
- Canadian corporate buyers have a strong “home bias” when sourcing projects. Half of the credits are generated in North America — 0.3 million (38.7 per cent) in Canada, followed by 0.1 million (11.48 per cent) from the United States. In contrast, globally, most purchased credits originate from developing countries.

## *Financial accounting considerations and sustainability-related disclosures*

- While there are no specific International Financial Reporting Standards (IFRS) related to carbon credits, considerations for purchasers of voluntary carbon credits are focused on identifying if the carbon credit is considered an asset. If recognized as an asset, they can be further classified as either inventories or intangible assets on the balance sheet. If not recognized as an asset, the cost of acquiring the credits will be recognized as an expense.
- Globally, there are a variety of sustainability disclosure standards and frameworks ranging from voluntary to mandatory. In most cases, companies must report their gross GHG emission targets, excluding carbon credits.

The findings and resources included throughout this report provide information companies may consider in order to stay on top of the evolving regulatory requirements and understand how their reporting may be impacted. It also highlights the demand from investors and other financial statement users for more consistent and detailed disclosures to assess companies' climate-related risks and strategies.

Based on the understanding of VCMs gained in this series and substantiated through a variety of interviews with participants in the VCM ecosystem, the final report explores the role of professional accountants in enhancing the integrity of VCMs.

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# Introduction

We are facing a race against time to reduce greenhouse gas (GHG) emissions meaningfully and align with the Paris Agreement's goal of limiting warming to 1.5 degrees Celsius. The first [global stocktake](#) (a process for countries and stakeholders to see where they're collectively making progress towards meeting their nationally determined contributions (NDCs) of the Paris Agreement) affirmed that, globally, we are not on track and shows many nations around the world are falling short on their climate goals. Voluntary carbon markets (VCMs) have the potential to advance climate action by providing an avenue for organizations to offset their hard-to-abate GHG emissions to meet their targets. However, VCMs face ongoing challenges and controversies that undermine their credibility and effectiveness.

To better understand carbon credit markets and the related issues and challenges, the Chartered Professional Accountants of Canada (CPA Canada), the International Federation of Accountants (IFAC) and the Institute for Sustainable Finance (ISF) at Smith School of Business, Queen's University collaborated to develop this series. Our first report, [Understanding the Voluntary Carbon Markets: Key Considerations for Professional Accountants and Purchasers on the Carbon Credit Life Cycle](#), provides a base-level knowledge of VCMs, including what a carbon credit is, why VCMs exist, the differences compared to compliance markets, an overview of the key market participants, a description of the typical carbon credit life cycle from generation to retirement, a review of prevalent risks and vulnerabilities, and some of the valuation and pricing considerations.

This report takes a deeper dive into understanding VCMs by looking at how they are used in Canada and worldwide and describes the related financial accounting and disclosure implications of using carbon credits towards GHG emission reduction targets. It also aims to inform decision-making for companies, investors and policymakers navigating the evolving landscape of VCMs and corporate climate action.

This report was based on desktop research, including a literature review of the global snapshot and data analysis on Canadian corporate buyers. Data sources include companies' responses to CDP climate change questionnaires from the reporting years of 2020 to 2022, the Net Zero Tracker, and major VCM registries, among other publicly available data.

We value your views and feedback. Comments about this report should be addressed to:

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# Use of voluntary carbon credits

This section of the report addresses, from a global and Canadian perspective, the following questions:

- Who are the corporate buyers of voluntary carbon credits?
- What are the types of carbon offset projects they buy, and where do the projects originate?
- How many carbon credits are offset against an entity's total emissions, and to what extent?
- How are the purchases of carbon credits reflected in an entity's sustainability and financial reports?

## Global snapshot

### Corporate buyers of voluntary carbon credits

Two-thirds of the world's largest public companies based on market capitalization use carbon credits to claim progress toward their net-zero targets.<sup>1</sup> Oil and gas companies such as Shell and Chevron and vehicle manufacturers such as Volkswagen were found to be the most active corporate buyers between 2020 and 2022.<sup>2</sup> In 2023, the top four sectors, fossil fuels, manufacturing, services and transportation, cumulatively account for 75 per cent of total carbon credit retirements.<sup>3,4</sup> Once topping the corporate buyer charts in North America (1<sup>st</sup>) and Europe (2<sup>nd</sup>), in 2019,<sup>5</sup> the financial sector came down to 7<sup>th</sup> globally in terms of retired volumes, following retail (5<sup>th</sup>) and biotech, health and pharma (6<sup>th</sup>) in 2023.<sup>6</sup>

### Project locations

While most corporate buyers are headquartered in the developed world, most carbon credits are created in developing countries. For example, among the 37.8 million carbon credits in circulation from 2020 to 2022, over 90 per cent of them originated from projects in developing countries, mostly from Indonesia (9.3 million), China (6.0 million), Colombia

1 Gabbatiss, J. & Pearson, T., Analysis: *How Some of the World's Largest Companies Rely on Carbon Offsets to 'Reach Net-Zero.'* Carbon Brief, September 2023.

2 Gabbatiss, J & Pearson, T., 2023.

3 A carbon credit is retired once the benefit has occurred and been claimed by the buyer. Most transactions happen bilaterally. There is often a time lag between transactions for end-use and retirements. In this report, we use "retirement," "transaction" and "purchase" interchangeably.

4 MSCI Carbon Markets, Trove Research, *Carbon Markets at an Inflection Point.* Webinar, January 2024.

5 Forest Trends' Ecosystem Marketplace. *Buyers of Voluntary Carbon Offsets, a Regional Analysis. State of the Voluntary Carbon Markets 2020, Third Installment Featuring European Buyers Offset Prices, Volumes, and Insights.* Forest Trends Association, 2021.

6 MSCI Carbon Markets, Trove Research, 2024.



(5.8 million), Peru (5.1million) and India (3.5 million).<sup>7</sup> Similarly, Ecosystem Marketplace<sup>8</sup>, a VCM-focused initiative of the non-profit organization Forest Trends, reports that Asia, Latin America and the Caribbean remained the top three project origination regions measured by transacted volumes despite sharp declines for those regions in 2023.<sup>9</sup> Interestingly, in 2023, reported transactions dwindled in all regions except North America, which witnessed a 15 per cent growth.<sup>10</sup> One of the reasons might be a preference shift from nature-based towards tech-based credits, where many<sup>11</sup> originated from North America.

## Carbon credit types and project categories

Avoidance and mixed credits dominate the types of credits retired. Based on a study by Carbon Brief, between 2020 and 2022, nearly 81 per cent of the retired credits were based on projects that avoid (also referred to as “reduce”) emissions or have a mixed reduction and removal impact, while removal credits only accounted for eight per cent of the total.<sup>12</sup> This study also suggests that most of these removal credits came from afforestation (i.e., the establishment of a forest or stand of trees) or reforestation (i.e., restoring previously existing forests) projects, carbon removals from which might not be “permanent” (compared to technological carbon methods, such as direct air capture).<sup>13</sup> The breakdowns roughly align with findings by MSCI Carbon Markets and Ecosystem Marketplace.<sup>14,15</sup> In 2023, when the transaction volumes dropped by 56 per cent,<sup>16</sup> removal credits remained the minority compared to avoidance and mixed credits.<sup>17</sup>

## Crediting programs

In terms of crediting programs, almost 70 per cent of the credits retired between 2020 and 2022 were issued by Verra’s Verified Carbon Standard (VCS), 12 per cent by Gold Standard, and 12 per cent by the United Nation’s Clean Development Mechanism (CDM), followed by a mix of other crediting programs.<sup>18</sup> In 2023, CDM retirement volumes contracted.<sup>19</sup> This may result from buyers’ preferences for newer vintage credits and the phase-out of certain CDM

7 Gabbatiss, J & Pearson, T., 2023.

8 Ecosystem Marketplace collects self-reported transaction data from respondents. The buyers they track include both end-users and intermediaries. In comparison, Carbon Brief relies on publicly disclosed retirements from end-users. In this report, the buyers we focus on are end-users.

9 Forest Trends’ Ecosystem Marketplace. 2024. *State of the Voluntary Carbon Market 2024*. Washington DC: Forest Trends Association.

10 Forest Trends’ Ecosystem Marketplace. 2024.

11 Forest Trends’ Ecosystem Marketplace. 2024.

12 Gabbatiss, J & Pearson, T., 2023.

13 Gabbatiss, J & Pearson, T., 2023.

14 MSCI Carbon Markets, Trove Research, 2024.

15 Forest Trends’ Ecosystem Marketplace. 2024.

16 In comparison, the MSCI Carbon Markets report indicates a 4 per cent drop in 2023 compared to 2022, measured by annual retirements. This could be the result of data collection differences and the time lag between transactions for end-use and retirements.

17 Forest Trends’ Ecosystem Marketplace. 2024.

18 Gabbatiss, J & Pearson, T., 2023.

19 MSCI Carbon Markets, Trove Research, 2024.

projects. As of 2023, the four mainstream voluntary standards—Verra’s VCS, Gold Standard, Climate Action Reserve (CAR) and American Carbon Registry (ACR) occupy over 90 per cent of the market share.<sup>20</sup>

### Reliance on carbon credits to reach climate-related targets

Ecosystem Marketplace found that voluntary carbon credits accounted for around two per cent of a typical buyer’s total emissions, according to their analysis of companies’ CDP responses for 2021.<sup>21</sup> At the aggregated level, a study found the industry-level offsets-to-emissions ratio (measured as aggregate carbon credit retirements divided by aggregate scope 1 direct emissions) to fall between 0 and 1.5.<sup>22</sup> Notably, the financial sector is ranked 2<sup>nd</sup> highest in the offsets-to-emissions ratio for U.S. and non-U.S. firm samples.<sup>23</sup> The study finds that companies are often incentivized to use carbon credits to bridge the last mile toward achieving decarbonization targets.<sup>24</sup>

### Science-based targets and voluntary carbon credits

Companies can generally set their own targets or may choose to set science-based targets validated by the Science-Based Targets initiative (SBTi). Science-based targets align with the Paris Agreement. Committing to targets under a specific initiative may restrict the ability to use carbon credits to meet targets. To validate a target as “science-based,” an entity submits its target to the SBTi Target Validation Team, which assesses the target to ensure it conforms with SBTi Criteria and aligns with climate science.

SBTi considered using voluntary carbon credits for abatement purposes on Scope 3 emissions. However, SBTi’s first round of technical reviews suggests that offsetting with voluntary carbon credits might hinder direct decarbonization of the value chain.<sup>25</sup> Therefore, at the date of this report, SBTi does not allow the use of carbon credits to be counted as emissions reductions towards the progress of companies’ near- or long-term science-based targets.

## Canadian snapshot

To capture how Canadian companies use carbon credits, we examined 58 of the largest public companies in Canada (by revenue, as detailed on the Forbes Global 2000 list). Among the 58 companies, 51 have set a GHG emissions reduction target, such as “net zero,” “climate

20 MSCI Carbon Markets, Trove Research, 2024.

21 Forest Trends’ Ecosystem Marketplace, *All in on Climate: The Role of Carbon Credits in Corporate Climate Strategies*, 2023.

22 Kim, S., Li, T., & Wu, Y. [Carbon Offsets: Decarbonization or Transition-Washing?](#) *SSRN Electronic Journal*, 2024.

23 Kim et al, 2024

24 Kim et al, 2024

25 Science Based Targets initiative, [Evidence Synthesis Report Part 1: Carbon Credits](#), 2024.

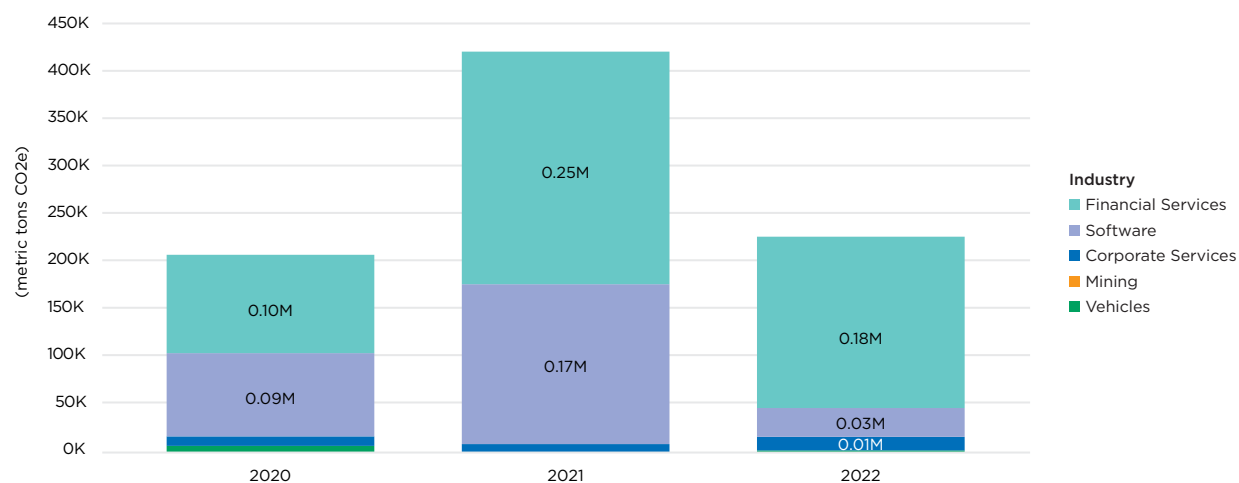
neutral,” “carbon neutrality,” or other variations.<sup>26</sup> Of the 51 Canadian companies that set GHG emissions reduction targets, only 13 disclosed via CDP the use of voluntary carbon credits towards meeting their targets in at least one reporting year between 2020 and 2022.<sup>27</sup>

### Canadian corporate buyers of voluntary carbon credits

Over the three years reviewed, 13 Canadian companies disclosed that a total of 0.86 million credits, representing 0.86 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), were purchased and subsequently retired to offset the corporate buyers’ emissions.<sup>28</sup> These companies were from a diverse range of industries, including financial services (7), mining (2), software (2), corporate services (1) and transportation (1). Interestingly, the active role played by the financial sector in Canada contrasts with the global findings described above, where fossil fuels, manufacturing, services and transportation sectors lead the purchases of carbon credits. This, however, echoes the findings by Ecosystem Marketplace that the financial sector was the leading buyer in North America in 2019.<sup>29</sup> Some companies, for example, some airlines, publicly announce their carbon credit purchases, but their CDP disclosures and sustainability reports during this time period provide limited information. Heavy emitters, such as the oil and gas sector, are subject to the compliance carbon pricing regimes in Canada, which is out of the scope of this research.

Concerning the purchase volumes (see **Figure 1**), 2021 was the highest over the three years, doubling the number of voluntary carbon credits purchased in 2020. Financial services (0.53 million) and software (0.29 million) comprise 95 per cent of the total number of purchased carbon credits between 2020 and 2022.

**Figure 1 total of purchased carbon credits (metric tons co2e) by canadian corporate buyers, by year and industry**



26 Net Zero Tracker. Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. 2024.

27 CDP data for activities in 2023 is not available at the time of this report.

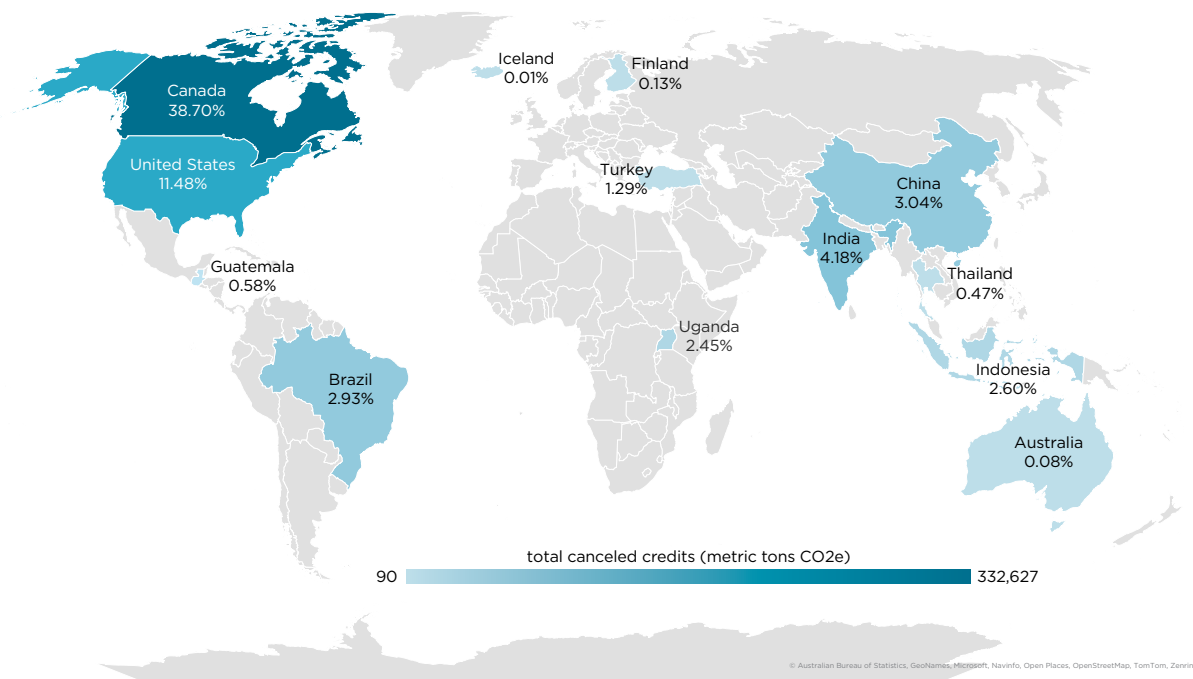
28 This report only examined the credits that were retired for voluntary offsetting purposes. This means the credits that were not retired yet and those for compliance reasons are out of our scope.

29 Forest Trends’ Ecosystem Marketplace. *Buyers of Voluntary Carbon Offsets, a Regional Analysis. State of the Voluntary Carbon Markets 2020, Third Installment Featuring European Buyers Offset Prices, Volumes, and Insights.* Forest Trends Association, 2021.

### Project locations

Canadian companies source voluntary carbon credits from projects developed across the globe (see **Figure 2**); however, based on our research, there is a strong “home bias” (i.e., North American-based projects). Notably, half of the credits are generated in North America—0.3 million (38.7 per cent) in Canada, followed by 0.1 million (11.48 per cent) from the United States. Although project locations for about 32 per cent of the credits are not identifiable, this looks different from the global landscape, where over 90 per cent of the purchased credits originate from developing countries.

**Figure 2 Project origination country/region (2020-2022)**

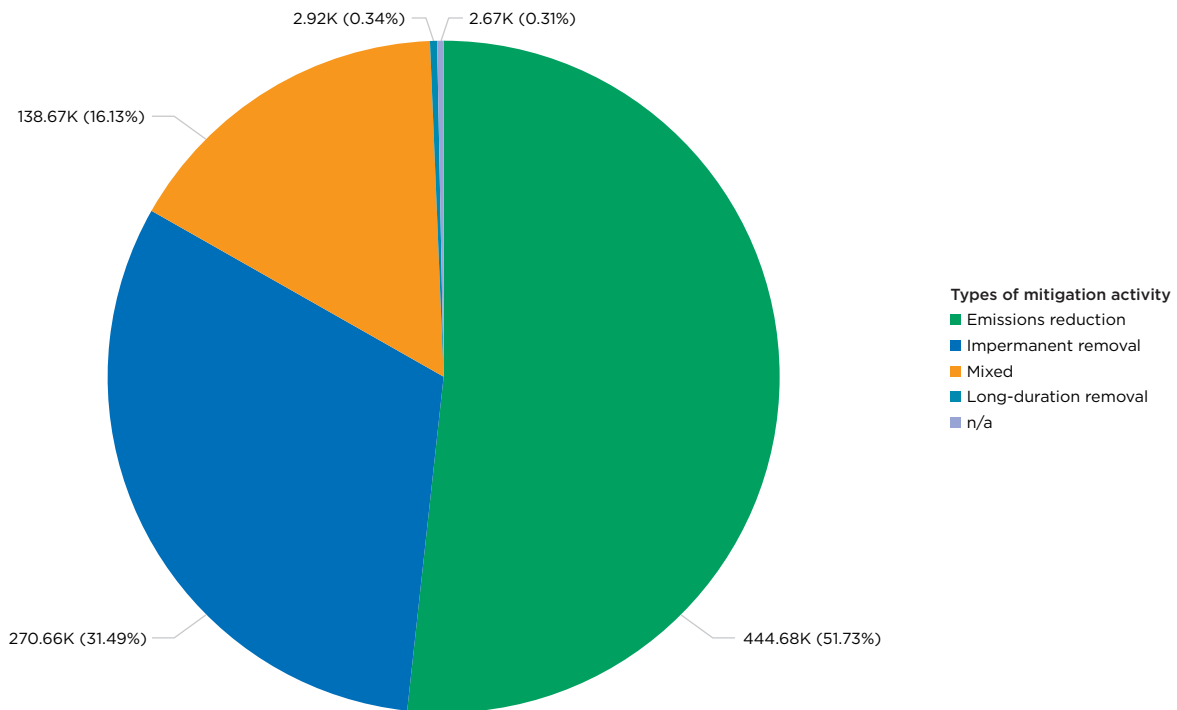


### Carbon credit types and project categories

Regarding the carbon credit types (see **Figure 3**), over 80 per cent are emission reduction and impermanent removal, compared to around 16 per cent of mixed credits and less than 0.5 per cent of long-duration removal. Tree planting is an example of an impermanent removal project, where carbon dioxide removed from the atmosphere is only temporarily stored in trees and land. In comparison, some industrial and commercial projects, such as direct air capture and carbon-absorbing concrete technology, are promised to deliver long-duration removal. The latter technologies, however, are more expensive to develop and implement at scale.

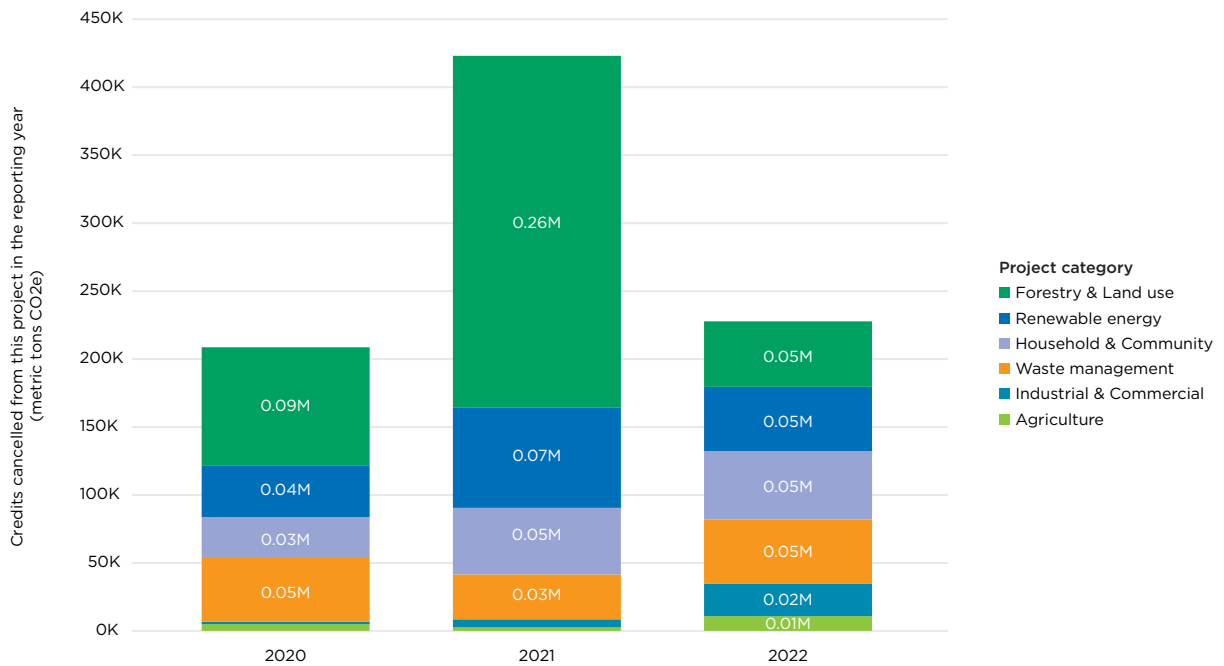
Emission reduction projects include renewables, clean cookstoves, waste management, etc. Some projects, mostly within the forestry and land use category, can generate mixed impacts (reduction and removal).

**Figure 3 Total of purchased carbon credits (metric tons CO2e) by carbon credit type (2020-2022)**



Zooming into the project category (see **Figure 4**), we find that forestry and land use projects used to occupy a larger share among all categories in 2020 (41 per cent) and 2021 (61 per cent). In 2022, it becomes more equal-weighted.

**Figure 4 Total of purchased carbon credits (metric tons CO2e) by year and project category (2020-2022)**



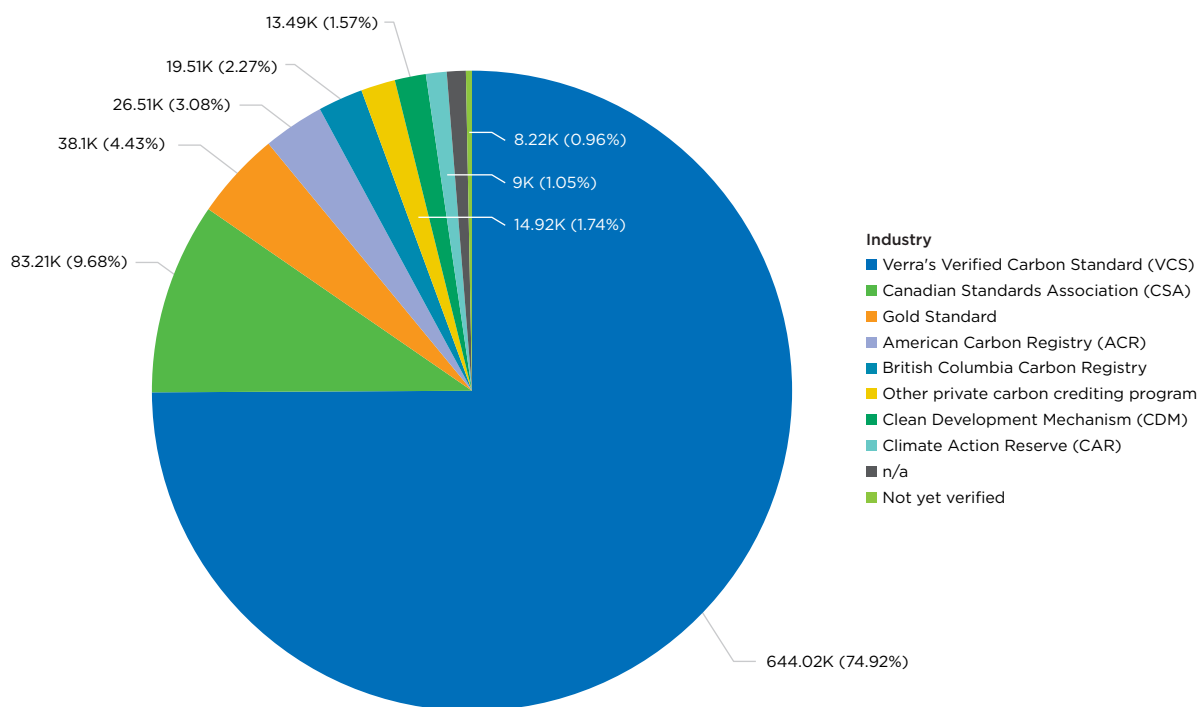
### Crediting programs

As shown in **Figure 5**, nearly three-quarters of voluntary carbon credits purchased by Canadian corporate buyers over the three years were issued by VCS.

Voluntary carbon credits issued by the Canadian Standards Association (CSA) occupy nearly 10 per cent of the share (2<sup>nd</sup> largest in our sample). CSA currently operates multiple independent registries, including the GHG CleanProjects® Registry, under which most of the CSA credits in our sample are issued. Almost all CSA credits in our sample are from projects developed in Canada. Similarly, the British Columbia (B.C.) Carbon Registry also supplies carbon offset credits (2.27 per cent in our sample) generated in B.C., Canada, for companies to achieve voluntary emission reduction targets.<sup>30</sup> The Gold Standard and American Carbon Registry (ACR), among other private crediting programs, supply most of the remaining credits.

It is worth noting that the Clean Development Mechanism (CDM) is a United Nations-run carbon offset scheme under the already expired Kyoto Protocol. Although it is transitioning to a new phase under the Paris Agreement, some credits created in earlier CDM projects continue circulating in the market, including those purchased by Canadian corporate buyers between 2020 and 2022.

**Figure 5 Total of purchased carbon credits (metric tons CO2e), by crediting program (2020-2022)**



30 The carbon offset credits listed in the British Columbia Carbon Registry can also be used by companies under the compliance scheme to meet regulatory requirements.

### Reliance on carbon credits to reach climate-related targets

Companies have a varying reliance on the use of voluntary carbon credits to reach their climate-related targets. On an aggregate level, a typical buyer in vehicles, corporate services and financial services uses credits to offset anywhere between 0.002 per cent to 9.881 per cent of their total emissions (scope 1, 2, 3 combined). This roughly aligns with the two per cent found by the Ecosystem Marketplace based on global data.<sup>31</sup>

However, it is difficult to accurately conclude how much reliance each industry has on the use of carbon credits based on the limited sample size and lack of consistent and reliable data. For example, for a mining entity, not all emissions, particularly Scope 3, may be reported. As a result, the number of purchased credits exceeds the total reported emissions. One software entity is an outlier as it has been purchasing carbon credits for purposes other than offsetting its own emissions. This is an example of reporting inconsistency that hinders definitive analyses.

### Disclosing and accounting for carbon credits

Most of the above information regarding the companies' use of carbon credits was from responses to CDP Climate Change questionnaires, a voluntary environmental disclosure platform. Generally, the companies' sustainability and/or climate reports provide less information than their CDP submissions regarding carbon credits. However, not all companies voluntarily disclose their climate-related information through CDP.

Among the 13 Canadian companies who disclosed via CDP the use of voluntary carbon credits, only two companies mentioned the purchase of carbon credits in their 2020 annual reports. None of the 13 companies separately reported or recognized carbon credits as an asset or expense in their financial statements. This is presumably because carbon credits purchased and used were not material to the companies examined.

31 Forest Trends' Ecosystem Marketplace, *All in on Climate: The Role of Carbon Credits in Corporate Climate Strategies*, 2023.

# Financial accounting considerations for purchasers of carbon credits

Accounting for carbon credits is an emerging topic expected to evolve as markets mature, the way entities use carbon credits changes, and accounting practices develop. Entities contemplating purchasing carbon credits to offset their emissions to meet previously set targets may be unsure how to account for those transactions in their financial statements.

There are no specific IFRS or US Generally Accepted Accounting Principles (US GAAP) or interpretations of those standards related to carbon credit markets. The Financial Accounting Standards Board (FASB) has an [active project on accounting for environmental credit programs](#) considering a fair value policy election and related disclosures.

Here, we explore some financial accounting considerations for entities that purchase and expect to use carbon credits to offset their emissions and meet their targets. Market participants involved in the carbon credit markets for other purposes (e.g., carbon credit generation) will have different considerations.

## Is a carbon credit an asset?

The first step is determining whether a carbon credit held by an entity is an asset. The definition of an asset is found under the conceptual framework (CF) in IFRS (CF 4.3 – CF 4.25). The definition is two-pronged:

- i. an asset is a present economic resource controlled by the entity as a result of past events and
- ii. an economic resource is a right that has the potential to produce economic benefits for the entity.

An example could be an entity with a contract (right) for a carbon credit. It can direct its use and obtain the economic benefits that may flow from it – through holding, utilization, retirement or sale.

To demonstrate that a carbon credit represents an economic resource that could produce an economic benefit, it should entitle the entity to produce cash inflows or avoid cash outflows. This may be difficult to do. Carbon markets are still developing, and there could be circumstances under which some credits do not meet the definition of an asset.



## Recognizing an asset

If an entity concludes that the carbon credit is not an asset, the cost of acquiring it will be immediately recognized as an expense. If, however, the carbon credit is an asset (satisfying the requirements in the CF), two balance sheet classifications and measurement alternatives are currently general practices as described below.

1. classifying the carbon credit as inventory under International Accounting Standard (IAS) 2 *Inventories*
2. classifying the carbon credit as an intangible asset under IAS 38 *Intangible Assets* (IAS 38)

IAS 38.2 states that the standard should not be applied for intangible assets that are considered to fall within the scope of another standard.

Determining whether a carbon credit should be classified and measured as inventory or an intangible asset will depend on the business purpose of the acquisition. The criteria of each are described below to aid in that analysis.

### Inventories

Carbon credits meet the criteria to be classified as inventories if they are:

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

### Intangible assets

IAS 38.8 defines an intangible asset as an identifiable non-monetary asset without physical substance. Breaking down the requirements to meet the criteria of an intangible asset, a carbon credit would meet the definition by the following:

<b>Identifiable</b>	Carbon credits are typically backed by a credit certificate issued by a carbon crediting program and housed on a registry. The certificates are generally tradable and transferrable.
<b>Non-monetary</b>	Carbon credits are not cash or another monetary asset.
<b>Without physical substance</b>	Carbon credits are not tangible, and merely represent one tonne of CO <sub>2</sub> or its equivalent.

Following IAS 38.21, an intangible asset should only be recognized if both of the following are true:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity
- the cost of the asset can be reliably measured

Generally, unless the carbon credits are being held for sale in the ordinary course of business (broker/traders that acquire carbon credits for the purposes of trading), one would expect an entity that acquires carbon credits to offset its own emissions to fit within IAS 38.

# Sustainability-related disclosure requirements on the use of carbon credits

Increasingly, regulators, investors and other market participants expect information, if material, about how entities use or plan to use voluntary carbon credits to offset GHG emissions to achieve a net GHG emissions target. For some investors, understanding an entity's strategy to reduce its GHG emissions and the quality of carbon credits used in that strategy is information that can be reasonably expected to influence a capital allocation decision.

**Table 1** summarizes some of the sustainability disclosure standards and frameworks that require an entity to report on information related to using carbon credits and offsetting.

Interoperability between sustainability reporting standards and frameworks is a key issue for companies that may be subject to reporting in compliance with multiple standards. The International Sustainability Standards Board (ISSB) standards were developed to be a global baseline of sustainability disclosures. In some circumstances, jurisdictions adopt, apply or are otherwise informed by the ISSB standards. For example, in Canada, the Canadian Sustainability Standards Board (CSSB) has used IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and S2 *Climate-related Disclosures* as a baseline to develop their Exposure Drafts of proposed Canadian Sustainability Disclosure Standard (CSDS) 1 *General Requirements for Disclosure of Sustainability-related Financial Information* and CSDS 2 *Climate-related Disclosures*. In other circumstances, interoperability guidance is provided. For example, in the European Union (EU), the European Sustainability Reporting Standards ([ESRS](#))-ISSB [Standards interoperability guidance](#) describes the alignment of disclosure requirements and information an entity starting with each set of standards needs to know to enable compliance with both sets of standards. These efforts aim to increase efficiency for entities that report under multiple standards.

For further information on how these sustainability disclosure standards and frameworks may apply to Canadian entities, see [CPA Canada's Sustainability Reporting Alert: Reporting Requirements—the Sustainability Reporting Landscape](#), which explains the sustainability reporting regulatory landscape in Canada, the status of mandatory sustainability reporting in Canada, and international standards and frameworks that will impact Canadian entities.

Under the standards and frameworks outlined in Table 1 below, entities must report their gross GHG emissions target, excluding carbon credits. Many of these standards require entities that make net zero claims based on carbon credits' use or planned use, to disclose detailed information on these credits and the underlying projects. Often, this includes credit volumes (compared against the total emissions to understand the reliance on carbon credits), offset project types and locations, and verification standards.

## Gross vs. net GHG emission targets

Gross GHG emissions targets reflect the total changes in GHG emissions planned within the entity's value chain. Net GHG emissions targets are the entity's targeted gross GHG emissions minus any planned offsetting efforts. Paragraph 36 (c) of IFRS S2 requires disclosure regarding whether the target is a gross GHG emissions target or a net GHG emissions target. For net targets, IFRS S2 also requires separate disclosure of its associated gross target.

In contrast, ESRS, E1 *Climate change* asserts that the GHG emission reduction targets shall be gross targets, which means that the entity shall not include GHG removals, carbon credits or avoided emissions to achieve the GHG emission reduction targets. However, E1 allows for use of carbon credits where the entity has made a public claim of GHG neutrality that involves them.

**Table 1 Sustainability disclosure standards: requirements on an entity’s use of voluntary carbon credits**

*This is not intended to be an exhaustive list of all related requirements.*

Disclosure standard	Issuing or enacting entity	Context
<p><a href="#"><u>IFRS S2 Climate-related Disclosures</u></a></p>	<p>International Sustainability Standards Board (ISSB)</p>	<p>Companies shall disclose factors necessary for users of general-purpose financial reports to understand the credibility and integrity of the carbon credits they plan to use. Examples include:</p> <ul style="list-style-type: none"> <li>• <b>the extent to which, and how, achieving any net GHG emissions target relies on the use of carbon credits</b></li> <li>• <b>third-party verifications</b></li> <li>• <b>types of carbon credits</b></li> <li>• <b>assumptions regarding the permanence of the carbon offset</b></li> </ul>
<p><b>CSDS 2 Climate-related Disclosures</b></p>	<p>Canadian Sustainability Standards Board (CSSB)</p>	<p>Regarding disclosures related to carbon credits, the exposure draft is fully aligned with IFRS S2.</p> <p>Proposed CSDS 2 was released for public consultation from March 13 to June 10, 2024. A final standard is expected to be issued in Q4 2024. For the most recent updates, refer to the <a href="#"><u>CSSB project listing</u></a>.</p>
<p><b>The EU’s CSRD</b></p> <p><a href="#"><u>European Sustainability Reporting Standards (ESRS) E1 Climate Change</u></a></p>	<p>European Commission</p>	<ul style="list-style-type: none"> <li>• Companies shall state the GHG emission reduction targets as <b>gross targets</b>, meaning that the undertaking shall not include GHG removals, carbon credits or avoided emissions as a means of achieving the GHG emission reduction targets.</li> <li>• Companies shall disclose: <ul style="list-style-type: none"> <li>– the amount of GHG removals and storage <b>in its upstream and downstream value chain</b></li> <li>– the amount of GHG emission reductions or removals <b>outside its value chain</b> it has financed or intends to finance through any purchase of carbon credits</li> </ul> </li> </ul> <p>In the case where the undertaking may have made public claims of GHG neutrality that involve the use of carbon credits, it shall explain, for example, whether and how these claims and the reliance on carbon credits <b>neither impede nor reduce the achievement of its GHG emission reduction targets; the credibility and integrity of the carbon credits used</b>, including by reference to recognized quality standards.</p>

Disclosure standard	Issuing or enacting entity	Context
<p><b>Guideline B-15</b>  <a href="#">Climate Risk Management</a></p>	<p>Canada's Office of the Superintendent of Financial Institutions (OSFI)</p>	<p>(Applicable to Federally Regulated Financial Institutions [FRFIs] supervised by OSFI)</p> <p>For any GHG emissions target disclosed, disclose it both gross of, and net of, carbon offsets, if applicable, and explain the type of offset (for example, carbon credit, nature-based, other).</p>
<p><b>The EU's</b>  <a href="#">Green Claims Directive</a></p>	<p>European Parliament and the Council</p>	<p><b>Green claims based solely on carbon offsetting schemes will remain banned.</b> Companies could, however, mention offsetting and carbon removal schemes in their advertisements if they have already reduced their emissions as much as possible and use these schemes for residual emissions only. The carbon credits of the schemes must be certified and of high integrity, such as those established under the <a href="#">Carbon Removals Certification Framework</a>.</p>
<p><b>California's</b>  <a href="#">Voluntary carbon market disclosures act (AB 1305)</a></p>	<p>California legislature</p>	<p>Companies using voluntary carbon offsets to make claims regarding the achievement of net zero emissions or its variant shall disclose all of the following on their website:</p> <ul style="list-style-type: none"> <li>• <b>the name of the business entity selling the offset and the offset registry or program</b></li> <li>• <b>the project identification number</b>, if applicable</li> <li>• <b>the project name as listed in the registry or program</b>, if applicable</li> <li>• <b>the offset project type</b>, and <b>site location</b></li> <li>• <b>the specific protocol</b> used to estimate emissions reductions or removal benefits</li> <li>• <b>independent third-party verification</b></li> </ul> <p>This section does not apply to entities that do not operate within the state or do not purchase or use voluntary carbon offsets sold within the state.</p>
<p><b>SEC's</b> <a href="#">The Enhancement and Standardization of climate-Related Disclosures for Investors</a></p>	<p>Securities and Exchange Commission (SEC) of the U.S., paused by a U.S. appeals court</p>	<p>If carbon offsets have been used as a <b>material component</b> of a registrant's plan to achieve climate-related targets or goals, the registrant will be required to disclose each of the items below:</p> <ul style="list-style-type: none"> <li>• <b>The amount of carbon avoidance, reduction or removal represented by the offsets</b></li> <li>• <b>The nature and source of the offsets</b></li> <li>• <b>A description and location of the underlying projects</b></li> <li>• <b>Any registries or other authentication of the offsets</b></li> <li>• <b>The cost of the offsets</b></li> </ul>

**Canadian Securities Regulation:** The Canadian Securities Administrators (CSA) issued a statement on March 13, 2024, indicating that it anticipates seeking comment on a revised rule setting out climate-related disclosure requirements. The CSA proposal will consider the final CSSB standards and may include modifications appropriate for the Canadian capital markets. The CSA also indicated that it anticipates adopting only the standards' provisions necessary to support climate-related disclosures. In the interim, CSA Staff Notice 51-138 *Reporting of Climate Change-related Risks* provides guidance to reporting issuers as to how they might approach preparing disclosure of material climate change-related risks, primarily focusing on disclosure obligations related to the MD&A and Annual Information Form.

## Materiality

It is worth noting that the materiality assessment differs among jurisdictions. The ISSB is aligned with the definition of materiality in IFRS – that is, information is material if omitting, obscuring or misstating it could be reasonably expected to influence investor decisions, commonly known as financial materiality (also commonly referred to as a “single materiality” approach). In addition to financial materiality, the EU’s Corporate Sustainability Reporting Directive (CSRD) introduces and requires the assessment of impact materiality – that is, companies must identify, evaluate and report on their impact on environmental and social factors (commonly referred to as a “double materiality approach”). Lastly, the U.S. Securities and Exchange Commission’s (SEC) climate disclosures require an entity to disclose information about carbon credits when they become a “material component” of an entity’s plan to achieve climate-related targets. An entity will need to assess whether their use of carbon credits is material, depending on the standards they are reporting under.

# Conclusion

The development of VCMs and the use of voluntary carbon credits will likely evolve differently in different regions depending on a variety of factors, from some potential convergences with compliance carbon markets to the emergence of jurisdictional safeguards and endorsements (such as the [principles](#) recently released in the U.S.) to support the integrity of the markets. We look forward to monitoring this evolution to see if VCMs can reach their potential to meet decarbonization objectives.

Based on our findings and interviews with a range of parties in the VCM ecosystem, our third and final report in this series will illustrate the role of CPAs in enhancing the integrity of VCMs and identify critical opportunities to foster trust, bolster transparency and strengthen accountability as VCMs continue to expand in Canada, and around the world.



# Resources

- [International Sustainability Standards Board \(ISSB\): Resources and guidance \(CPA Canada\)](#)
- [Canadian Sustainability Standards Board \(FRAS Canada\)](#)
- [Carbon Credits Research July 2024 \(Canadian Accounting Standards Board\)](#)
- [Sustainability knowledge hub \(IFRS\)](#)
- [Ambitious corporate climate action \(SBTi\)](#)
- [Purchaser's accounting for voluntary carbon credits \(KPMG Global\)](#)
- [IFRS Financial reporting considerations for entities participating in the voluntary carbon market \(PWC\)](#)
- [Accounting for Carbon Credits: International Swaps and Derivatives Association \(ISDA\)](#)



#### DISCLAIMER

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