

Accounting for Cap and Trade Systems



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Note to Readers

This paper has been prepared to inform members about cap and trade systems and the primary issues involved in accounting for allowances held for compliance purposes and liabilities resulting from emissions. It is intended to stimulate dialogue about accounting issues related to cap and trade systems.

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Whether transactions recorded and disclosed in documents filed under Canadian securities regulations comply with applicable requirements is ultimately a legal matter and should be considered carefully. The information included in this publication is for general information purposes only and should not be used as a substitute for consultation with professional advisors.

We invite readers to submit comments on the issues in this paper.

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Purpose and Scope of Paper

This paper has been prepared to inform members about cap and trade systems and the primary issues involved in accounting for allowances held for compliance purposes and liabilities resulting from emissions. It has also been prepared to stimulate discussion among accounting professionals as to potential options for accounting for assets and liabilities created by cap and trade transactions, including when they should be recognized and how they should be measured.

The scope of this paper is focused on accounting for cap and trade transactions under existing International Financial Reporting Standards (IFRS).

While there is brief mention of certain elements of the following in the section Other Accounting Considerations, this paper does not address:

- complex accounting issues such as derivatives for the future purchase and sale of allowances and credits, hedging arrangements and allowances held for trading purposes
- narrative disclosures that should accompany accounting for cap and trade systems (i.e., disclosures in financial statement notes or Management's Discussion & Analysis (MD&A) reports)
- assurance implications related to cap and trade systems.

For more resources related to cap and trade systems and the accounting for them, refer to Appendix C.

The timing of this paper has been influenced by recently expressed government commitments to carbon pricing.

Pan-Canadian Framework on Clean Growth and Climate Change

On December 9, 2016, the government of Canada announced the *Pan-Canadian Framework on Clean Growth and Climate Change* (the Framework).¹

The Framework features four pillars:

- carbon pricing
- complementary actions to further reduce emissions
- adaptation measures
- actions to accelerate innovation, support clean technology and create jobs.²

Broad-based carbon pricing is the foundation of the Framework.

The Framework indicates that by 2018 all jurisdictions (including those that have not yet signed onto the Framework) must have carbon pricing. Jurisdictions must have instituted one of the following systems:

- an explicit price-based system (e.g., British Columbia's carbon tax³) where the explicit price must be *at least*:
 - \$10 per tonne in 2018
 - \$20 per tonne in 2019
 - \$30 per tonne in 2020
 - \$40 per tonne in 2021
 - \$50 per tonne in 2022

1 Government of Canada. *Pan-Canadian Framework on Clean Growth and Climate Change*. (Ottawa: Queen's Printer for Canada, 2016). www.canada.ca/content/dam/themes/environment/documents/weather1/20170125-en.pdf

Eight provincial and three territorial governments signed on to the Framework with the federal government. As of April 2017, Saskatchewan and Manitoba had not yet signed on to it.

2 www.canada.ca/content/dam/themes/environment/documents/weather1/20170125-en.pdf

3 Currently B.C. applies a \$30 tax on fossil fuel combustion (e.g., coal, natural gas, gasoline).

- a cap and trade system (e.g., Ontario and Quebec’s cap and trade programs under the Western Climate Initiative with California) where by 2030 emissions must be reduced by at least 30% below 2005 levels and with declining “annual caps to at least 2022 that correspond, at a minimum, to the projected emission reductions resulting from the carbon price that year in price-based systems.”⁴ Appendix B provides details on Ontario’s cap and trade system.

The federal government plans to introduce an explicit price-based system in jurisdictions that do not meet the national benchmark. The federal government has indicated that by early 2022 it will review the comparative effectiveness of the carbon pricing systems.

Given the federal government’s commitment to carbon pricing and the role that cap and trade systems play in some of the provincial plans, this paper on cap-and-trade systems appears timely.⁵

4 Framework, page 49.

5 Another recent government commitment to carbon pricing is the Ontario government’s decision to institute a cap and trade system effective January 1, 2017. See Appendix B for more information on this system.

Overview of Cap and Trade Systems

Jurisdictions around the world have implemented cap and trade systems as an approach to reducing greenhouse gas emissions. In order to understand the accounting implications of a cap and trade system, it is important for readers to understand the specific features of the system.

The following are basic features of many cap and trade systems.⁶

- The government places a limit (cap) on the amount of greenhouse gas (GHG) emissions certain industries are allowed to emit. The cap is generally ratcheted down over time.
- Capped participants must submit annual reports on their GHG emissions, together with independently prepared verification reports.
- Capped participants must demonstrate that they comply with the cap at the end of the compliance period.
- To comply, capped participants must submit to the government allowances and/or credits equal to the reported and verified emissions for the compliance period.⁷
 - An *allowance* is an authorization to emit one tonne of carbon dioxide equivalent (CO₂e).⁸ Allowances are government-created instruments that can be granted for free or purchased.

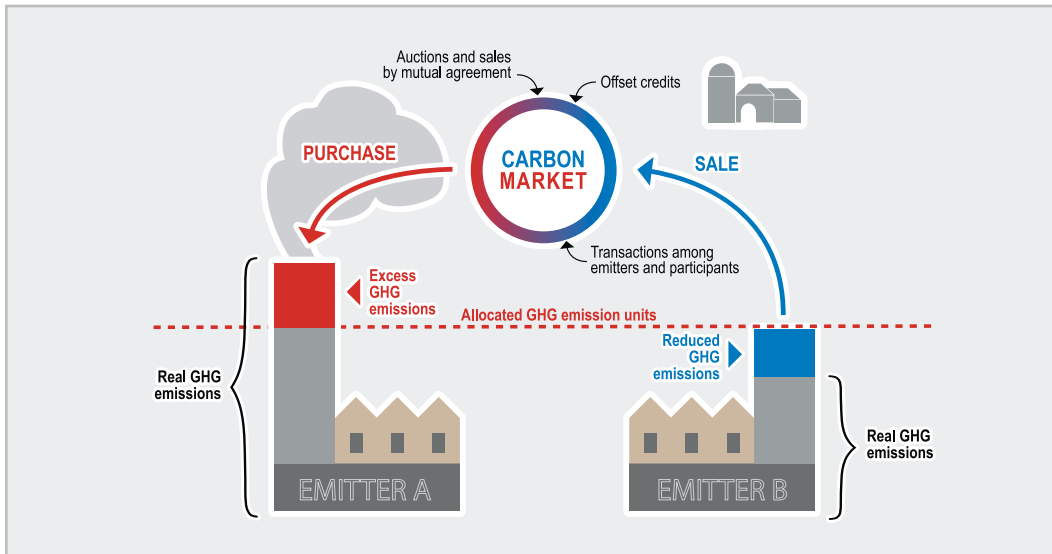
6 In Canada, the provinces of Quebec and Ontario have joined the Western Climate Initiative (WCI) with the State of California to create a cap and trade market. The basic features set out in this paper are consistent with those of the Western Climate Initiative. For information on aspects of the regulatory system of the newest member of the WCI, Ontario, see Appendix B.

7 Some cap and trade systems restrict the number of offset credits that can be used for compliance purposes. For example, Ontario's system restricts use of offset credits by a capped participant to 8% of allowances remitted for a given compliance period.

8 Carbon dioxide equivalent is a metric to standardize emissions from various GHGs.

- An *offset credit* is a government-created compliance instrument. It represents a reduction (or avoidance or removal) of one tonne of CO₂e. Offset credits may be awarded to certain eligible initiatives outside the capped sectors. To qualify, offset projects must meet certain rules.
- Distribution of free allowances typically occurs in the first few years of the program as a transitional measure for businesses. Subsequently, the distribution of free allowances is phased out.
- Following the end of the compliance period, capped participants must submit to the government allowances and credits equal to their emissions in the preceding compliance period.

The diagram below depicts a cap and trade system with two entities: Emitter A (left) and Emitter B (right), both capped participants. Emitter A expects its emissions to exceed its cap and thus is required to purchase allowances and/or credits from the market for compliance purposes. Emitter B expects its emissions to come in under its cap and therefore has excess allowances to sell into the market.



Source: www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/in-brief.pdf

The following transactions occur in the secondary market:

- purchase/sale of allowances already distributed to capped participants
- purchase/sale of credits
- purchase/sale of derivative products.

Refer to Appendix A for a glossary of key terms related to cap and trade systems and to Appendix B for an overview of Ontario's cap and trade system.

Accounting Issues

Carbon pricing has financial implications for businesses. Over time, the materiality of these issues may increase as emissions caps become increasingly stringent.

Background on International Accounting Standards Board (IASB) Activities

It is important to note that the IASB does not currently have any specific guidance to explain how to account for transactions in a cap and trade system operating under existing IFRS.

In April 2016, the IASB issued a Staff Paper providing a project update on a research project on pollutant pricing mechanisms (PPMs), which includes cap and trade systems.⁹ The project is currently an assessment-stage project only.

The Staff Paper noted that:

- There are accounting issues that indicate possible gaps and inconsistencies in existing IFRS standards.
- There is a need to work with staff on other projects, such as the Conceptual Framework project and the Provisions, Contingent Liabilities and Contingent Assets project.
- The IASB received feedback that preparers did not want the same conclusions as found in IFRIC 3 *Emission Rights* (discussed in detail on the following pages).¹⁰
- The IASB is awaiting further research and feedback before deciding whether to proceed with a standards-level project or not.

⁹ See <http://archive.ifrs.org/Meetings/MeetingDocs/IASB/2016/April/AP20-Pollutant-Pricing-Mechanisims.pdf>.

¹⁰ IFRIC stands for “IFRS Interpretations Committee”, the interpretative body of the International Accounting Standards Board, the entity that develops, maintains and issues IFRS.

Accounting Questions

There are two basic accounting questions for transactions created by a cap and trade system:

1. Recognition: Which International Financial Reporting Standards apply to assets and liabilities?
2. Measurement: How are assets and liabilities initially and subsequently measured? What are the implications for the income statement?

Accounting Approaches

In this paper, three accounting approaches being used and accepted under existing IFRS are outlined for allowances held for compliance purposes and liabilities resulting from emissions. These approaches are referred to throughout this document as follows:

1. IFRIC 3 approach
2. government grant approach
3. net liability approach

These approaches may be given different names by various parties and variations of these approaches may be possible.

An illustrative example of each approach is provided after the following discussion.

IFRIC 3 Approach

IFRIC 3 was issued in December 2004. While the IASB acknowledged that it expressed a valid interpretation of existing IFRS, it was subsequently withdrawn in June 2005. In contrast to other approaches, IFRIC 3 required that assets and liabilities be considered separately.

OVERVIEW OF IFRIC 3

IFRIC 3 specified that:

- Allowances were intangible assets under IAS 38 *Intangible Assets*
- Allowances received for less than fair value were to be measured initially at fair value. The difference between the amount paid and fair value was to be treated as a government grant; the resulting deferred credit was to be amortized to profit or loss on a systematic basis over the compliance period under IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*
- A liability was to be recognized as emissions were produced and measured usually at the market value of the allowances needed to settle the obligation under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

The following table outlines the accounting under IFRIC 3 for assets and liabilities resulting from cap and trade transactions.

ACCOUNTING TREATMENT UNDER IFRIC 3

	Asset	Government Grant	Liability Resulting from Emissions
Recognition	<ul style="list-style-type: none"> • Purchased and Free Allowances: recognized as intangible assets and accounted for in accordance with IAS 38 <i>Intangible Assets</i>. An intangible asset is an identifiable non-monetary asset without physical substance (IAS 38.8). 	<ul style="list-style-type: none"> • Free Allowances: recognized as government grants under IAS 20 <i>Accounting for Government Grants and Disclosure of Government Assistance</i>. 	<ul style="list-style-type: none"> • recognized in accordance with IAS 37 <i>Provisions, Contingent Liabilities and Contingent Assets</i>.
Measurement	<p>Initial:</p> <ul style="list-style-type: none"> • Free Allowances: measured at fair value on the issuance date (IAS 38.44). • Purchased Allowances: measured at cost on the purchase date (IAS 38.45). <p>Subsequent:</p> <ul style="list-style-type: none"> • Purchased and Free Allowances: re-measured in accordance with either the cost method or the fair value method¹¹ (if an active market exists) (IAS 38.74 and IAS 38.75). Gains or losses in re-measurement are generally included in other comprehensive income (OCI) (IAS 38.85 and 38.86). 	<p>Initial:</p> <ul style="list-style-type: none"> • Government Grant: measured as the difference between amount paid (if any) and fair value at the grant date (IAS 20.23). <p>Subsequent:</p> <ul style="list-style-type: none"> • Government Grant: Deferred income related to the government grant for free allowances is amortized into P&L systematically as the emission expense is recognized (IAS 20.12). 	<p>Initial:</p> <ul style="list-style-type: none"> • A liability is recognized for the best estimate of the present obligation to deliver allowances equal to emissions that have occurred at the reporting date. This would usually be the present market price of the number of allowances required in order to comply with the cap (IAS 37.36). • A related expense is recognized in P&L as emissions occur.

¹¹ IAS 38 refers to the “revaluation method”. For the purposes of this paper, we use the term “fair value method” for simplicity.

Asset	Government Grant	Liability Resulting from Emissions
<p>Amortization:</p> <ul style="list-style-type: none"> Purchased and Free Allowances: Allowances are amortized into profit and loss (P&L) systematically over the useful life (IAS 38.97).¹² If conditions warrant, allowances are tested for impairment under IAS 36 <i>Impairment of Assets</i> (IAS 38.111).¹³ 		
<p>Presentation</p>	<p>Gross presentation is required. Offsetting of the asset and liability is not permitted.</p>	

Conceptual Issues

Many stakeholders, including the preparer community, felt that IFRIC 3 created “accounting mismatches” that “would not fairly present the economic effects of the scheme”.¹⁴

Specifically, IFRIC 3 had the following mismatch issues:

Potential measurement mismatch—Liability is re-measured to fair value at the reporting date. IAS 38 provides an option where intangible assets can be (but do not have to be) revalued to fair value at the reporting date.

Potential mismatch in location of reporting—The effect of re-measuring intangible assets when the fair value method under IAS 38 is used is recognized in other comprehensive income; the liability revaluation is recognized through profit and loss. In addition, any cumulative revaluation surplus is generally transferred directly to retained earnings and not to P&L.

12 Because allowances are not used until they are used to settle the emission liabilities, no amortization would have to be recorded while they were held.

13 This would be done for the cash-generating unit (CGU) to which allowances are attached.

14 IFRS Staff Paper, *Pollutant Pricing Mechanisms*, April 2016, page 3.

There are few Canadian examples of financial statement notes referring to accounting policies used for transactions created by a cap and trade system. Only a handful of relevant disclosure examples was identified in our high-level scan of 2016 annual regulatory filings from publicly traded companies. Further, we found no examples of an entity following an IFRIC 3 approach.¹⁵ In addition, few entities outside Canada are using an IFRIC 3 approach, according to the IETA report referenced in Appendix C.

In the absence of a specific standard, IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* states that management must use its judgment when developing and applying an accounting policy that results in information that is relevant to the economic decision-making needs of users and is reliable.¹⁶ In making that judgment, management must consider the following:

1. “the requirements and guidance in IFRSs dealing with similar and related issues; and
2. the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Conceptual Framework.”¹⁷

As such, it is worth exploring two alternative accounting approaches to IFRIC 3 that have gained some degree of acceptance under existing IFRS.

Government Grant Approach

Under this approach, the treatment of the asset is consistent with IFRIC 3, but the liability is measured differently. Specifically, at initial recognition and subsequently, a liability is measured taking into account the carrying value of the allowances held for compliance purposes (carrying value of allowances will depend on whether the cost or revaluation method is used). The rationale for this approach is based on recognition that an outflow of resources is only probable when it is in excess of the carrying amount of the allowances held (IAS 37.14).

¹⁵ An in-depth research study was not performed for the purposes of this paper. Rather, a high-level review was performed to identify any relevant Canadian disclosures.

¹⁶ Para 10 of IAS 8.

¹⁷ Para 11 of IAS 8.

Net Liability Approach

This approach takes an approach to liability measurement that is consistent with the government grant approach described above. In addition, however, in contrast to both the preceding approaches, the asset and government grant for free allowances are recognized initially at nominal value (nil). This is permitted under IAS 20.23 and IAS 38.44.

Illustrative Example

We illustrate how the different accounting approaches would be applied in the following example. The following assumptions are made for the purposes of this illustrative example:

- The company's allowances on hand are comprised of a mixture of free allowances and purchased allowances.
- The weighted average approach is used to track the carrying value of allowances for the measurement of emissions liabilities.
- The government granted 80 free allowances at a fair value of \$15 each at the beginning of the accounting period.
- The company purchased 20 allowances at \$15 each during the accounting period.
- At the end of the accounting period, the fair value of allowances is \$25 each.
- The company intends to use the allowances on hand for compliance purposes.
- The compliance obligation at the end of the accounting period is 100 allowances.
- The cost method allowed under IAS 38 is used.
- An active market exists for allowances.

	IFRIC 3 Approach	Government Grant Approach	Net Liability Approach
Asset			
Initial and subsequent recognition: purchased allowances	\$300 (cost: 20 × \$15)	\$300 (cost: 20 × \$15)	\$300 (cost: 20 × \$15)
Initial and subsequent recognition: free allowances	\$1,200 (fair value: 80 × \$15)	\$1,200 (fair value: 80 × \$15)	Nil (nominal value: 80 × \$nil)
Amortization	Nil	Nil	Nil
Government Grant			
Initial recognition: free allowances	\$1,200 (fair value: 80 × \$15)	\$1,200 (fair value: 80 × \$15)	Nil (nominal value: 80 × \$nil)
Amortization: as emissions are incurred	\$1,200 (fair value: 80 × \$15)	\$1,200 (fair value: 80 × \$15)	Nil (nominal value: 80 × \$nil)
Emissions Liability			
Recognition: as emissions are incurred	\$2,500 (fair value: 100 × \$25)	\$1,500 (carrying value: \$1,200 + \$300)	\$300 (carrying value: \$300 + \$nil)
P&L Impact			
Amortization of government Grant: during the accounting period	\$1,200	\$1,200	Nil
Cost of Emissions: during the accounting period	\$2,500	\$1,500	\$300
Gain on use of allowances: at settlement	\$1,000 ((20 × \$10) + (80 × \$10))	Nil	Nil
Net Impact	\$300	\$300	\$300

Other Accounting Considerations

While out of scope for the purposes of this paper, there are two additional circumstances that may impact the accounting for allowances under a cap and trade system. In this section, we briefly highlight the implications of allowances held for trading and financial instruments.

Allowances Held for Trading

Regulated entities may buy, sell, hold or use allowances and credits solely to meet their regulatory compliance requirements.¹⁸ At the end of a compliance period, regulated entities must remit sufficient allowances and credits to the government to meet their obligations. However, as compliance periods often extend over multiple years, these entities could choose to trade some allowances and credits throughout the accounting period.

In these cases, entities need to consider whether any allowances and credits are held for trading purposes. If some allowances and credits are held for trading purposes, different accounting treatment may apply, depending upon the specific context of a given organization.

¹⁸ A futures market for allowances can develop under a cap and trade system. Hedge arrangements are excluded from the scope of this paper.

Financial Instruments

Although emission credits themselves are unlikely to be financial instruments, there may be arrangements that entities enter into to manage compliance that qualify as financial instruments.

For example, an entity may enter into fixed-price forward contracts or options for the purchase of credits to mitigate cash flow risk relating to compliance obligations. Such contracts can take various forms; some may only be settled net in cash, others may require delivery of credits.

Entities will need to evaluate whether such contracts qualify as derivatives; if so, whether they qualify for the “own use” exception. Under IFRS 9, some entities may choose not to apply “own use” to contracts that otherwise qualify as derivatives, where accounting for them at fair value would mitigate an accounting mismatch (e.g., mitigating a mismatch with compliance obligations measured at fair value).

Conclusion

The financial transactions associated with cap and trade will become increasingly material over time as caps become more stringent and carbon prices increase.

We encourage members to investigate and determine the key features of relevant cap and trade systems.

In addition, we urge preparers of financial reports to start evaluating the need for and conceptual basis of their accounting policies related to cap and trade transactions to ensure those policies are appropriate in the context of the organization's activities. Preparers should consult with their professional advisors as appropriate.

We invite feedback on this issue from our stakeholders so we can determine how CPA Canada can further this dialogue. Comments can be submitted to:

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APPENDIX A

Glossary of Key Terms

Allowance—An allowance is a government-created instrument that can be granted for free or purchased. It is an authorization to emit one tonne of carbon dioxide equivalent (CO₂e). CO₂e is a standard unit for expressing the impact of each different greenhouse gas (e.g., methane, hydrofluorocarbons) in terms of the amount of CO₂ that would create the same amount of warming.

Cap—The cap is the maximum number of allowances that the government creates each year.

Capped Participants—Capped participants can be either mandatory or voluntary participants. The government sets out in legislation those entities that must participate in the cap and trade system (i.e., mandatory participants). Certain entities which are already required to report their emissions to the government but are not mandatory participants may choose to opt in to be a capped participant (i.e., voluntary participants).

Cap and Trade—Cap and trade is a market-based policy tool that establishes an emission cap on total emissions from a group of regulated entities and creates a financial incentive to reduce emissions. Also referred to as “cap and trade system” or “program”.

Compliance Period—The compliance period is a government-determined period during which capped participants must obtain sufficient allowances and credits to match their emissions for the period.

Early Reduction Credit—An early reduction credit is a government-created compliance instrument issued to a mandatory participant that reduces its emissions before the system is put in place.

Market Participants—Market participants are persons (other than capped participants) who choose to register to participate in an auction or the secondary market.

Offset Credit—An offset credit is a government-created compliance instrument. It represents a reduction (or avoidance or removal) of one tonne of CO₂e. Offset credits may be awarded for certain eligible initiatives outside the capped sectors. To qualify, offset projects must meet certain rules.¹⁹

Trade—Trade is an exchange of allowances or credits for cash under a cap and trade program.

True Up—True-up is the process of demonstrating compliance. Capped participants must submit to the government allowances and credits equal to their emissions in the preceding compliance period. True-up usually occurs within months after the end of the compliance period.

¹⁹ Cap and trade systems may stipulate that the use of offset credits is limited to only a percentage of the emissions for a compliance period.

APPENDIX B

Ontario's Cap and Trade System

This appendix provides an overview of the cap and trade system in the Province of Ontario.

Quick Facts

- came into effect on January 1, 2017
- caps the amount of GHG emissions Ontario's largest polluters can emit, and lowers that cap over time
- capped participants must submit allowances and/or credits²⁰ equal to their actual emissions for the compliance period
- if a capped participant expects its emissions to exceed its cap, it must buy allowances and/or credits for compliance purposes; if it expects its emissions to come in under its cap, it can sell these excess allowances into the market
- capped participants can get allowances:
 - free of charge from the government
 - at-auction—revenue goes to the government²¹
 - by buying them in the secondary market—revenue goes to market participants (i.e., not the government)
- capped participants can get:
 - early reduction credits free from the government
 - offset credits by buying them from market participants

²⁰ Offset credits or early reduction credits.

²¹ Ontario's first auction occurred March 2017. Almost 25.3 million 2017 allowances were sold at a settlement price of \$18.08 and over 0.8 million 2020 allowances were sold at \$18.07 generating over \$472 million in proceeds for the government. See <https://news.ontario.ca/ene/en/2017/04/ontario-announces-results-of-first-cap-and-trade-program-auction.html>.

- Ontario is expected to link with the programs in Quebec and California beginning in 2018 (programs in Quebec and California have been linked to each other since 2014), enabling the trading of allowances and credits among the three jurisdictions for compliance purposes

Who Are the Participants?

The system includes capped participants and market participants. Capped participants may be both mandatory and voluntary.

Mandatory participants:

- large final emitters that undertake a specified greenhouse gas activity (e.g., cement, copper, nickel, iron, steel, aluminum, zinc, pulp and paper production, petroleum refining)²²
- specified larger natural gas distributors, fuel suppliers and electricity importers.²³

Voluntary participants are owners or operators of a facility that undertake specified GHG activities emitting between 10,000 and 25,000 tonnes of carbon dioxide equivalent annually and are required to submit emissions reports to the government. Voluntary participants can opt into the program.²⁴

Market participants are persons, other than capped participants, who choose to register to participate in an auction or the secondary market.

What Are Caps and Allowances?

The cap is the maximum number of allowances the government creates each year. Allowances are government-created instruments representing one tonne of carbon dioxide equivalent.

Allowances are associated with a given year and are known by their “vintage” (e.g., 2017 vintage, 2018 vintage, etc.).

22 Large final emitters are those emitting at least 25,000 tonnes of carbon dioxide equivalent emissions annually.

23 See Appendix C for the link to a preliminary list of capped participants in Ontario.

24 A carbon dioxide equivalent is a standard metric used to standardize emissions from greenhouse gases. As some greenhouse gases are more “potent” than others, this metric reflects their potency.

Capped participants can get their allowances from the government (for free or at quarterly auctions) or by buying them from registered market participants.

The Minister of Environment and Climate Change grants free allowances based on GHG activities for the period.²⁵

What Are Credits?

Only the Minister of Environment and Climate Change can grant credits. They could be early reduction credits or offset credits purchased from registered market participants.

Early reduction credits are intended to recognize early action.

Offset credits are compliance instruments granted for reductions, removals, or avoidances of carbon dioxide equivalent emissions achieved by those who are *not* capped participants. There are specific rules related to the creation of offset credits.

The use of offset credits by a capped participant is limited to 8% of allowances remitted for a given compliance period.

How do Capped Participants Demonstrate Compliance with the Cap?

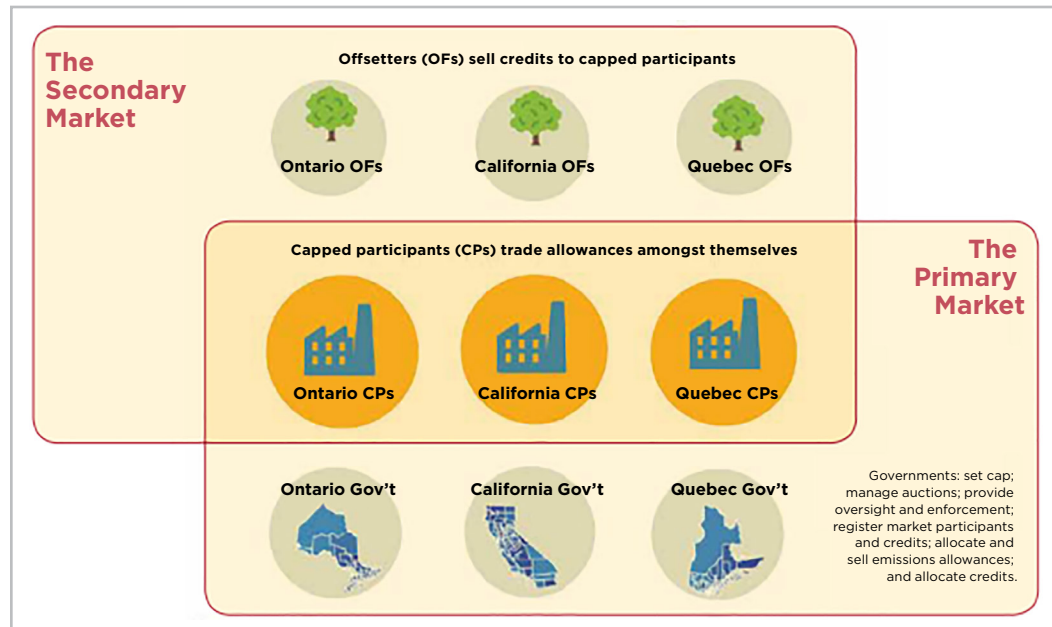
Following the end of a compliance period, capped participants must remit to the government sufficient allowances and credits to match their reported and verified greenhouse gas emissions for that period. This process is called “true-up”.

Ontario's first compliance period began January 1, 2017 and extends to December 31, 2020 (subsequent compliance periods will be for three years). November 1, 2021 is the true-up date for the first compliance period.

²⁵ Government of Ontario. *Methodology for the Distribution of Ontario Emission Allowances Free of Charge*. (Toronto: Queen's Printer for Ontario, May 16, 2016).

Primary and Secondary Markets

Facing Climate Change, the 2016 Report of the Environmental Commissioner of Ontario, sets out the primary and secondary markets related to Ontario's cap and trade program (see diagram below).



Source: <https://media.assets.eco.on.ca/web/2016/11/Appendix-A-Introduction-to-Cap-and-Trade-in-Ontario.pdf>

As depicted, capped participants trade allowances among themselves (i.e., the primary market).

In addition, there is a secondary market in which the following may be bought or sold:

- emissions allowances
- early reduction credits
- offset credits
- derivative financial products.²⁶

²⁶ Futures contracts on allowances may be traded. For example, a participant might purchase the right to buy a certain quantity of 2018 vintage allowances to be delivered on a given date and sold at a pre-determined price.

APPENDIX C

Where to Find More Information

This appendix provides links to external resources that may be useful for entities when assessing the implications of a cap and trade system, including accounting for transactions related to cap and trade under IFRS.

1. International Emissions Trading Association (IETA). *Cap and trade: The Basics*. www.ieta.org/Resources/Resources/101s/cap-and-trade-the-basics-101-april15.pdf
2. International Accounting Standards Board (IASB). *IFRS Work Plan: Pollutant Pricing Mechanisms (formerly Emissions Trading Schemes)*. <http://archive.ifrs.org/Current-Projects/IASB-Projects/Emission-Trading-Schemes/Pages/Emissions-Trading-Schemes.aspx>
3. International Accounting Standards Board (IASB). Staff Paper (April 2016): *Pollutant Pricing Mechanisms*. <http://archive.ifrs.org/Meetings/MeetingDocs/IASB/2016/April/AP20-Pollutant-Pricing-Mechanisims.pdf>
4. International Emissions Trading Association (IETA). *Trouble Entry Accounting – Revisited*. www.ieta.org/resources/Resources/Reports/trouble_entry_accounting.pdf
5. Western Climate Initiative (California, Quebec, Ontario). www.wci-inc.org
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