



Pacific  
Carbon  
Trust

# Summary Note on the Amended Québec Cap-and- Trade Regulation

August 2012

## Summary Note on the Amended Québec Cap-and-Trade Regulation

About Pacific Carbon Trust .....	4
I. Background .....	5
II. Overview .....	5
<i>Geographic Restrictions</i> .....	5
<i>Scope and Coverage</i> .....	5
<i>Allowance Allocation</i> .....	7
<i>Price Ceiling</i> .....	7
<i>Allowance Price Floor</i> .....	7
<i>Auction Purchase Limits</i> .....	7
III. Offsets .....	8
<i>General</i> .....	8
<i>Start Date and Crediting Period</i> .....	8
<i>Offset Project Conditions</i> .....	8
<i>Aggregated Offset Projects</i> .....	10
<i>Validation</i> .....	10
<i>Verification</i> .....	10
<i>General Account</i> .....	10
<i>Environmental Integrity Account (Invalidation Liability)</i> .....	11
IV. Offset Protocols .....	11
<i>Protocol 1</i> .....	11
Covered Manure Storage Facilities – CH <sub>4</sub> Destruction .....	11

## Summary Note on the Amended Québec Cap-and-Trade Regulation

<b>Protocol 2 .....</b>	<b>12</b>
<b>Landfill Sites – CH4 Destruction.....</b>	<b>12</b>
Additionality:.....	12
Landfill site in operation at the time of registration.....	12
Landfill site that is closed at the time of registration .....	13
<b>Protocol 3 .....</b>	<b>13</b>
<b>Destruction of Ozone Depleting Substances (ODS) Contained in Insulating Foam     Recovered from Appliances .....</b>	<b>13</b>
Additionality:.....	13

## Summary Note on the Amended Québec Cap-and-Trade Regulation

This document is in draft form only and represents the interpretation of Pacific Carbon Trust staff of the Amended Québec Cap-and-Trade Regulation. This document is designed to provide information to entities looking to participate in the Québec Cap-and-Trade system. Pacific Carbon Trust shall have no liability arising from the use of this document.

If you have suggestions, questions, comments or changes to the draft document please contact Jacob Stein at [jacob.stein@pacificcarbontrust.com](mailto:jacob.stein@pacificcarbontrust.com) or Pedro Camanho at [pedro.camanho@pacificcarbontrust.com](mailto:pedro.camanho@pacificcarbontrust.com).

## About Pacific Carbon Trust

Pacific Carbon Trust is a Crown corporation established in 2008 to deliver BC-based greenhouse gas offsets to help clients meet their carbon reduction goals and to support the growth of BC's low-carbon economy. Projected annual demand for Pacific Carbon Trust offsets is 800,000 tonnes. Through this long-term demand and its commitment to credible offsets, Pacific Carbon Trust is systematically building the BC offset market.

For more information on Pacific Carbon Trust, visit [www.pacificcarbontrust.com](http://www.pacificcarbontrust.com).

## Summary Note on the Amended Québec Cap-and-Trade Regulation

### I. Background

In July 2011, the Province of Québec released its [Regulation respecting a cap-and-trade system for greenhouse gas emission allowances](#). The greenhouse gas (GHG) emission reduction target was set at 20% below 1990 levels, to be achieved by 2020. On June 8, 2012, the Government of Québec released [Draft regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances](#). The amendments harmonize Québec's cap-and-trade system with California's cap-and-trade system as well as introduce three offset protocols available to participants in Québec's carbon market. Québec and California have committed to link their cap-and-trade programs and have set a goal to hold the first allowance auction before Jan. 1, 2013. On Aug. 30, 2012, California will hold its first practice auction which will include Québec entities. It is likely, however, that the first Québec auction will occur in February 2013. The draft regulation amendments were open to public comment for a 60-day period ending on Aug. 6, 2012.

### II. Overview

The purpose of this regulation is to set rules for the operation of the cap-and-trade system for greenhouse gas emission allowances established under Québec's Environment Quality Act. The regulation determines which emitters are required to cover their emissions as well as the terms and conditions for registering with the system. The regulation specifies which emission allowances can be used along with the terms and conditions for their issue, use and trading. The regulation also stipulates what information must be provided by emitters and other persons or municipalities eligible to register for the system.

#### **Geographic Restrictions**

Only a resident of, or municipality within, Canada may register as a participant in the system. If the application is made by a person who does not live in Québec, the name and contact information of a Québec resident who is designated to represent the applicant must be provided.<sup>1</sup>

#### **Scope and Coverage**

Any entity that emits a quantity equal to or greater than 25,000 metric tonnes of carbon dioxide equivalent per year and who falls under one of the following sectors identified in Table 1 is required to cover their emissions according to the cap-and-trade system:

---

<sup>1</sup> Draft Regulation Amendment, page 1762A, Section 8.

## Summary Note on the Amended Québec Cap-and-Trade Regulation

**Table 1: Scope and Coverage**

Sectors	Type of Activity
Mining, Quarrying, and Oil and Natural Gas Extraction	Extraction of naturally occurring minerals.
Electric Power Generation, Transmission and Distribution	Generation of bulk electric power, transmission from generating facilities to distribution centers, and/or distribution to end users.
Natural Gas Distribution	Distribution of natural or synthetic gas to consumers through a system of mains. Gas marketers or brokers, who arrange the sale of natural gas over distribution systems operated by others, are included.
Steam and Air-Conditioning Supply	Production and/or distribution of steam and heated or cooled air.
Manufacturing	Physical or chemical transformation of materials or substances into new products.
Pipeline Transportation of Natural Gas	Pipeline transportation of natural gas, from gas fields or processing plants to local distribution systems.

**Table 2: Annual Cap and Allowance Budgets**

Compliance Period	Year	Allowances (Mt)
<b>First</b>	2013	23.7
	2014	23.3
<b>Second</b>	2015	63.6
	2016	61.0
	2017	58.5
<b>Third</b>	2018	56.0
	2019	53.4
	2020	50.9

The scope of the program will increase in the second compliance period, which accounts for the increase of allowances in 2015.

## Summary Note on the Amended Québec Cap-and-Trade Regulation

### Allowance Allocation<sup>2</sup>

The Minister of Sustainable Development, Environment, and Parks auctions emission units four times per year. At least 45 days before an auction, the Minister will publish a notice of auction on the Ministry website.

In order to address industry competitiveness and other concerns Québec will allocate emissions to the following sectors free of charge:<sup>3</sup>

- Mining and quarrying sectors (except oil and gas);
- All manufacturing activity (except oil and gas);
- Steam and air conditioning suppliers (for industrial purposes);
- Electricity imports from jurisdictions that are covered under a separate cap and trade program but not linked to Québec's; and
- Electric power generation sold under contract signed prior to Jan. 1, 2008, with a fixed sale price that has not been renewed or extended after that date.

The number of emissions units that will be allocated free of charge to each eligible emitter will be determined by the Minister based on efficiency benchmarks that are calculated through the equations listed in Appendix C of the Regulation.

### Price Ceiling<sup>4</sup>

The Minister will keep an allowance reserve account in which he will hold 1% of emission units from the first compliance period, 4% from the second and 7% from the third. The allowance reserve units are divided equally into three categories and sold at \$40, \$45, and \$50 for the category A, B, and C respectively. This effectively creates a price ceiling. Beginning in 2014, these prices will increase annually by 5%, adjusted to inflation.

### Allowance Price Floor<sup>5</sup>

The price floor will start at \$10 per emission unit in 2012 and will increase annually by 5% plus inflation. If the auction is conducted jointly with a partner entity (e.g. California) the price floor will be the higher of the two price floors at the official conversion rate of the Bank of Canada at noon on the day of the auction.

### Auction Purchase Limits<sup>6</sup>

The quantity of emission units of the current or previous vintage year that may be purchased by the same bidder at an auction is limited to:

---

<sup>2</sup> Regulation respecting a cap-and-trade system for greenhouse gas emission allowances - Section 45

<sup>3</sup> Regulation respecting a cap-and-trade system for greenhouse gas emission allowances - Appendix C

<sup>4</sup> Regulation respecting a cap-and-trade system for greenhouse gas emission allowances - Section 58

<sup>5</sup> Regulation respecting a cap-and-trade system for greenhouse gas emission allowances - Section 49

<sup>6</sup> Draft Regulation Amendment, page 1778A, Section 31

## Summary Note on the Amended Québec Cap-and-Trade Regulation

- 15% for emitters eligible for free allocation of emission units;
- 40% for emitters who are ineligible for free allocation of emission units;
- 40% for electricity importers and fuel distributors;
- 4% for participants who are not emitters; and
- For emission units of vintages subsequent to the current year, the limit that may be purchased by the same bidder at an auction is 25% for all bidders.

### III. Offsets

#### General

A ‘promoter’ is the person or entity who proposes an offset project; this entity is also known as a “project proponent” in other frameworks. A promoter of an offset credit project must be a Québec resident or a legal person or municipality having an establishment in Québec.<sup>7</sup> To register a project, the proponent must apply to the Minister for the project to be registered in the register of offset credit projects by submitting a project plan and relevant documents.<sup>8</sup> All emission allowances will be summarized in the public register of emission allowances on the Minister’s website.

#### Start Date and Crediting Period<sup>9</sup>

Only GHG emission reduction projects that began on or after Jan. 1, 2007 are eligible for the issue of offset credits. If a GHG offset project has a start date that is before the relevant protocol was listed in Appendix D of the regulation, the application for registration must be sent to the Minister no later than one year after the relevant protocol comes into force. The start date of the offset project is the date of the first GHG emission reductions.

The maximum crediting period for any GHG offset project is 10 years, unless otherwise indicated in the protocol for that project activity. The promoter may request a renewal of the crediting period only once, for a combined maximum of 20 years.

#### Offset Project Conditions<sup>10</sup>

The regulation states that reductions in GHG emissions must result directly from an action or a decision by the promoter.

In order for an offset project to be eligible it must satisfy the following criteria:

---

<sup>7</sup> Draft Regulation Amendment, page 1785A, Section 70.4

<sup>8</sup> Draft Regulation Amendment, page 1785A, Section 70.5

<sup>9</sup> Draft Regulation Amendment, page 1783A, Section 70.2

<sup>10</sup> Draft Regulation Amendment, page 1784A, Section 70.3

## Summary Note on the Amended Québec Cap-and-Trade Regulation

**Table 3: Offset Eligibility Criteria**

Criteria	Description
<b>Permanent</b>	Projects that can be reversed once the crediting period is over are not eligible.
<b>Additional</b>	<p>The project must be voluntary.</p> <p>The project must not be carried out in response to a legislative or regulatory provision, a permit or other type of authorization, an order made under an Act or regulation, or a court decision.</p> <p>The emission reductions must result from a project that goes beyond the current practices described in the applicable protocol for the project.</p>
<b>Verifiable</b>	The emission reductions resulting from the project must be measurable and verifiable with a maximum error threshold of 5%.
<b>Leakage</b>	The emission reductions must not be compensated by increases in GHG emissions occurring outside the boundaries of the project.
<b>Beyond Current Practices</b>	Projects that implement a business-as-usual scenario are not decreasing emissions in a credible manner.
<b>Within Boundaries</b>	Projects can only claim GHG reductions for activities that occur within the defined project boundary.
<b>Counted Once</b>	Projects must not have received credit under another GHG emission reduction program.
<b>Clear Ownership</b>	The promoter must demonstrate clear ownership of the GHG reductions.
<b>Recent</b>	The GHG reductions resulting from an offset project must begin within one year after the project is registered or the project will risk being removed from the register.

## Summary Note on the Amended Québec Cap-and-Trade Regulation

### Aggregated Offset Projects<sup>11</sup>

A promoter may aggregate GHG offset projects of the same type carried out on several sites for various members of an aggregation. Each project must meet the offset project conditions of the regulation and of the relevant protocol. Each member party to the aggregation must also sign a declaration authorizing the promoter to carry out the project. No project may be added to the aggregation once the application has been submitted. The first project to begin is considered the reference project for the application of the time limits for renewal of the offset project.

### Validation<sup>12</sup>

The project plan for GHG offsets must be validated in accordance with ISO 14064-3. The validator must be accredited under ISO 14065 by a member of the International Accreditation Forum located in Canada or the United States and according to an ISO 17011 program. In the previous three years, the validator must not have acted as a consultant to the promoter or a member of the aggregation, for the purpose of developing or calculating the GHG reductions attributable to the project.

### Verification<sup>13</sup>

The project report for GHG offsets must be verified in accordance with ISO 14064-3. The project report must be accompanied by a verification report conducted by a verification organization accredited under ISO 14065 by a member of the International Accreditation Forum located in Canada or the United States and according to an ISO 17011 program. In the previous three years, the verifier must not have acted as a consultant to the promoter or a member of the aggregation, for the purpose of developing or calculating the GHG reduction attributable to the project. The verifier must not have also validated the project plan nor have verified more than six consecutive project reports for the project.<sup>14</sup>

If less than 25,000 metric tonnes of CO<sub>2</sub>e reductions have been achieved during the period, then the promoter may postpone the verification period to the following year.

### General Account

Following the receipt of positive verification results, the Minister places an offset credit for each metric tonne of CO<sub>2</sub>e for 94% of the GHG reductions into the promoter's general account.

---

<sup>11</sup> Draft Regulation Amendment, page 1787A, Section 70.7

<sup>12</sup> Draft Regulation Amendment, page 1787A, Section 70.8

<sup>13</sup> Draft Regulation Amendment, page 1792A, Section 70.14

<sup>14</sup> When the promoter wishes to have the project report verified by a verification organization or a verifier other than one that verified the report for the preceding year, the organization or verifier must not have verified the report for the project during the 3 previous years.

## Summary Note on the Amended Québec Cap-and-Trade Regulation

### Environmental Integrity Account<sup>15</sup> (Invalidation Liability)

The Minister keeps an environmental integrity account, containing the offset credits that may be extinguished to replace the illegitimate or invalidated offset credits not surrendered or replaced by a promoter.<sup>16</sup> A total of 6% of the credits of each verified project are put into the Minister’s environmental integrity account. In the case that a promoter’s offset credits become invalid, the promoter has 30 days to replace them. If the promoter fails to replace the invalid credits in 30 days, the Minister removes the project from the offset registry and replaces the illegitimate offset credits by withdrawing an equivalent amount from the environmental integrity account.

The environmental integrity account is notably different from the California system, in which a ‘buyer liability’ clause obligates the buyer to hold the burden if an offset credit is invalidated (except in the case of forestry projects).

## IV. Offset Protocols

- Covered Manure Storage Facilities – CH4 Destruction
- Landfill Site – CH4 Destruction
- Destruction of Ozone Depleting Substances Contained in Insulating Foam Recovered from Appliances

### Protocol 1<sup>17</sup>

#### Covered Manure Storage Facilities – CH4 Destruction

This protocol covers any project designed to reduce GHG emissions by destroying the CH4 captured from the manure storage facility of an agricultural operation in Québec that is raising one of the following livestock:

**Table 4: Eligible livestock**

Livestock	Emission Factor KgCH <sub>4</sub> / head / year
Hog Piglets	1.66
Hogs	6.48
Hog Sows	7.71
Dairy Cows	48

<sup>15</sup> Draft Regulation Amendment, page 1794A, Section 70.19

<sup>16</sup> Draft Regulation Amendment, page 1761A, Section 6

<sup>17</sup> Draft Regulation Amendment, page 1807A, Appendix D, Protocol 1

## Summary Note on the Amended Québec Cap-and-Trade Regulation

<b>Other Cattle</b>	<b>1</b>
---------------------	----------

For a project to be eligible for offset credits it must adhere to certain conditions. The project must:

- Involve the installation of a manure storage facility cover and a CH<sub>4</sub> destruction device;
- Capture and destroy CH<sub>4</sub> that, before the project, was emitted to the atmosphere; and
- Be carried out within the borders of the province of Québec.

### Protocol 2<sup>18</sup>

#### Landfill Sites – CH<sub>4</sub> Destruction

This protocol covers any project designed to reduce GHG emissions by destroying the CH<sub>4</sub> captured in a landfill site in Québec. The project must use an eligible device to destroy captured CH<sub>4</sub> at an eligible landfill that meets the following conditions:

- A site that is in operation and receives less than 50,000 tonnes of residual material per year and has a total capacity of less than 1.5 million cubic metres.
- The site has less than 450,000 tonnes of residual materials in place, or the CH<sub>4</sub> captured from the LFG has a heat capacity of less than 3 GJ/h.
- Eligible destruction devices are enclosed flares, open flares, combustion engines, boilers and turbines.

#### Additionality:

The project must capture and destroy CH<sub>4</sub> that, before the project, was emitted to the atmosphere. The project is considered additional if it complies with the above points and if it can quantify the emissions according to the protocol which includes assessing CH<sub>4</sub> generated using the USEPA's LandGem software (<http://www.epa.gov/ttnatc1/products.html#software>).

#### Landfill site in operation at the time of registration

- When the site has more than 100,000 tonnes of residual materials in place or received more than 10,000 tonnes of residual materials annually, the promoter must include an assessment of the CH<sub>4</sub> emitted by the landfill site in the plan.
- If the quantity of CH<sub>4</sub> emitted is equal to or greater than 1,000 tonnes of CH<sub>4</sub> per year, the project is eligible for the issue of offset credits for no longer than 5 years.

---

<sup>18</sup> Draft Regulation Amendment, page 1826A, Appendix D, Protocol 2

## Summary Note on the Amended Québec Cap-and-Trade Regulation

### Landfill site that is closed at the time of registration

- If the site was new or was extended between 1998 and 2005, it must have a maximum capacity of less than 3,000,000 cubic metres.
- If the site was new or extended between 2006, and 2008, it must receive less than 50,000 tonnes of residual materials annually and have a maximum capacity of less than 1,500,000 cubic metres.
- If the site became active in 2009 or a subsequent year, the conditions for landfill sites in operation apply.

### **Protocol 3**<sup>19</sup>

#### **Destruction of Ozone Depleting Substances (ODS) Contained in Insulating Foam Recovered from Appliances**

This protocol covers any project designed to destroy ODS contained in insulating foam recovered from freezing storage and refrigeration appliances in an authorized destruction facility in Canada or the United States. Projects carried out in the United States must be in compliance with the Compliance Offset Protocol Ozone Depleting Substances Projects: Destruction of U.S. Ozone Depleting Substances Banks. Foam recovered outside Canada or the United States is not eligible.

***Table 5: Eligible Ozone Depleting Substances (ODS)***

ODS	Global Warming Potential	Emission Rate
<b>CFC-11</b>	4,750	0.44
<b>CFC-12</b>	10,900	0.55
<b>HCFC-22</b>	1,800	0.75
<b>HCFC-141b</b>	725	0.50

#### Additionality:

The project is considered to go beyond current practice if the destroyed ODS does not originate in appliances from facilities under the authority of the federal government of the United States. In order to comply with the requirements of the regulation, the ODS must be:

- Extracted from the foam to a concentrated form under negative pressure;
- Collected, stored and transported in hermetically sealed containers;
- Destroyed in concentrated form; and

<sup>19</sup> Draft Regulation Amendment, page 1845A, Appendix D, Protocol 3

## Summary Note on the Amended Québec Cap-and-Trade Regulation

- Destroyed within 12 months from the project start date.
- The project must include information on the chain of traceability, from the point of origin of the ODS-containing foam to the point of destruction of the ODS.