

Québec Cap-and-Trade System for GHG Emissions, linked with California and Ontario

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Outline

- 1. Context
- 2. Basics of the Québec Cap-and-Trade system
- 3. How offset credits are generated
- 4. Features and benefits of offset credits, including means to ensure quality
- 5. Where/How potential buyers can purchase offset credits
- 6. Tracking of offset credits



1. Context

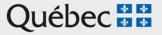


- Québec Cap-and-Trade is a <u>Sub-national Compliance C&T system</u>, in operation since Jan 1st, 2013
- Became linked with California's on Jan 1st, 2014, and Ontario's on Jan 1st, 2018
- Each jurisdiction has its own legislations/regulations to establish and implement its system, but all 3 systems have been designed based on the same principles and criteria (Western Climate Initiative – WCI), hence are fully compatible
 - ✓ Make up a <u>fully fungible regional carbon market</u>, the largest in North America and the first to be designed and managed by sub-national governments in different countries









2. Basics of the C&T system

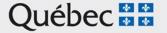


Scope (same general rules for all WCI Jurisdictions)

- Industry and Electricity: ≥ 25 kt CO₂ eq. per year
- **Fuel distribution**: ≥ 200 liters of fuel in Québec per year
 - 80-85% of GHG emissions in Québec are covered by the cap-and-trade system (not covered : e.g. emissions from agriculture and waste)

Compliance periods (same general rules for WCI Jurisdictions)

3 compliance periods: 2013-2014; 2015-2017; 2018-2020



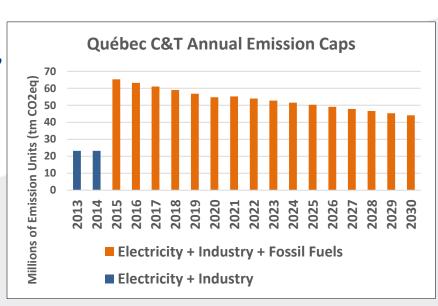
2. Basics of the C&T system



Emissions caps

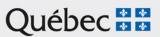
Caps (same general rules; caps specific to each)

- Compliance obligation: For a compliance period, each covered emitter must acquire a number of emission units corresponding to its actual GHG emissions for that period
- <u>Caps</u>: Sum of all emission units available for all covered emitters together
- Determined to contribute to achieve Québec's targets in 2020 (-20%) and in 2030 (-37,5%) below 1990



Distribution of emission units

- Free allocation (flexibility to WCI Jurisdictions):
 Emission units are distributed for free to some covered trade-exposed industries to take into account competitiveness issues
- <u>Auctions</u> (same general rules): Emissions units may be bought at quarterly joint auctions (now held jointly Québec-California-Ontario), using an electronic platform
 - Québec auction revenues transferred to the Green Fund: 618 M\$ in 2017



2. Basics of the C&T system



Offset Component

(same general rules for all WCI Jurisdictions)

WHAT

- Complementary Market-Based Tool, as a component of the C&T
- Enable implementation of projects carried out by promoters on a voluntary basis, to reduce GHG emissions in sectors other than those subject to C&T compliance obligations (e.g. agriculture, waste, forest, ...)
- Promoters may be awarded offset credits, which they can sell to covered emitters to comply in any of the WCI partners jurisdictions
 - ✓ Primary use of WCI offset credits

WHY

- Decrease compliance costs assumed by covered emitters without compromising the environmental integrity of the C&T
- Encourage GHG emission reductions and support technology development & innovation in those other sectors, through financial incentives

3. How offset credits are generated



Project types

- Eligible projects Currently five protocols in Québec :
 - 1. Covered manure storage facilities CH4 destruction
 - 2. Landfill sites CH4 treatment or destruction
 - Destruction of ozone depleting substances contained in insulating foam or used as refrigerants removed from refrigeration, freezer and airconditioning appliances
 - 4. Active coal mines Destruction of CH4 from a drainage system
 - 5. Destruction of CH4 from ventilation air
- Protocols in development (for new project types):
 - Carbon sequestration projects from afforestation or reforestation on private land in Québec

3. How offset credits are generated



Registered projects & offset credits issued

- In Québec: 11 projects for a total of 563 993 offset credits (Sept. 2017)
- All project reports, verification reports and information on credits: publicly available on the on-line Québec Register

http://www.mddelcc.gouv.qc.ca/changements/carbone/creditscompensatoires/registre creditscompensatoires-en.htm

Offset credit projects and credits issued on September 27th, 2017

Protocol	Project title	Credits issued (tCO2e)
Landfill sites – CH₄ destruction	LE001 - Reduction of GHG emissions at the closed landfill Marchand	33 558
	LE002 - Reduction of GHG emissions at the closed and opened landfill La Lièvre	15 372
	LE003 - Capture and Destruction of Biogas - Area B at the opened landfill RDL	14 667
	LE004 - Reduction of GHG emissions at the closed landfill Saint-Raymond	8 492
	LE005 - Reduction of GHG emissions at the opened landfill Marchand	3 335
	LE006 - Reduction of GHG emissions at the opened landfill Saint-Flavien	4 116
	LE007 - Reduction of GHG emissions at the opened landfill Gaspé	
	LE008 - Capture and Destruction of Biogas – opened landfill Nouvelle-Beauce	
	LE009 - Reduction of GHG emissions at the opened landfill Val d'Or	
Destruction of ozone depleting substances	SACO-001 - ODS Extraction and destruction	161 510
	SACO002 - Extraction and destruction of ODS contained in isolating foam or used as refrigerants	322 943
Total		563 993



4. Features & benefits of offset credits

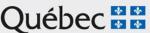


A key benefit

✓ All offset credits (and emissions units) issued by any of the 3 WCI Jurisdictions are <u>fully fungible</u> in the WCI carbon market

A unique feature : <u>Environmental Integrity Account</u> (Québec and Ontario)

- Funded by the automatic withholding of 3% of the offset credits issued for offset projects
- Can be used to replace any offset credit deemed illegitimate after issuance
 - ✓ Québec and Ontario offset credits are thus 100% guaranteed and cannot be cancelled, which reduces market uncertainty

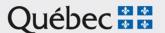


4. Features & benefits of offset credits



Core criteria to ensure offset credit quality and market environmental integrity

- GHG emission reductions must be : Additional, Real/Quantifiable, Permanent, Verifiable, Enforceable
- Ownership: Promoters must have legal ownership of the emission reductions resulting from the project
- Verification: Emission reductions must be verified in accordance with ISO 14064-3 by a verification body accredited under ISO 14065 in Canada or USA
- <u>Use of approved protocols only</u>: Contain clear, specific eligibility and quantification requirements – Robust protocol development process, with stakeholder and public consultations
- Prevent double counting: Emission reductions for which offset credits are requested cannot have received credits in WCI market or another program



5. Where/How to buy offset credits

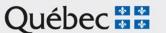


Where/How to buy credits:

- Directly from offset project promoters
- Through a broker
 - The government does not control or intervene in the buying/selling of credits, but the final exchange of credits must be tracked in the system

Some requirements for non-emitter buyers to gain access to offset credits:

- Must be registered in the system as a <u>participant</u>
- Must have a domicile or an establishment in Canada (Québec system)
- Will get an account in the system and be able to exchange credits with other participants or emitters



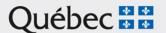
6. Tracking of offset credits



Key infrastructure to support C&T operations

Compliance Instrument Tracking System Service (CITSS)

- ➤ Electronic-plateform system common for all WCI partners
- Manages <u>accounts</u> and tracks <u>compliance instruments</u> issued through participating WCI Jurisdictions
 - Compliance instruments: emissions units and offset credits, each identified by an individual serial number
- Tracks compliance instruments from the point of issuance by Jurisdictions, ownership, transfer by emitters and participants, and up to final compliance retirement
- ➤ Enables verification of compliance and avoidance of double-counting in the WCI market





For more information:

Québec:

http://www.mddelcc.gouv.qc.ca/chan gementsclimatiques/marchecarbone_en.asp

Ontario:

https://www.ontario.ca/page/cap-and-trade-ontario

California:

https://www.arb.ca.gov/cc/capandtra de/capandtrade.htm

Thank you!

