Assessment of the operating parameters of the Cap-and-Trade System

Pre-consultations

October 25, 2023



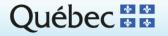




Submitting comments

- Comments must be submitted in writing, before Novembre 30, 2023, using the web form
 - The web form is available online on the <u>Assessment of the operating</u> parameters of the Cap-and-Trade System Web page
- The comments received will be published in their entirety on the web page following the pre-consultation period
 - Only the e-mail address will not be published





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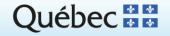
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Agenda

- Reminder of the objective of the approach
- Background
 - Description of offset credits
 - Current status of offset credits
 - Overview of offset credits in other regulated markets
- Role of offset credits for the post-2030 period in the context of carbon neutrality for 2050
 - Reminder of Québec's GHG emission reduction targets
 - Role of offset credits
 - Proposals
- Next steps
- Questions period

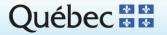
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Webcast Logistics

- Presentation
 - This presentation is available online on the <u>Assessment of the operating</u> parameters of the Cap-and-Trade System Web page
- Questions period during the webinar
 - Submit questions in writing during and after the presentation
 - Questions will be posted in the "Q & A" section of the webinar screen and read by the moderator at the end of the presentation



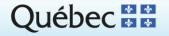




Objective of the approach

- Ensuring efficient operation of the cap-and-trade system to reduce GHG emissions in Québec
- Contribute to achieving the greenhouse gas emissions reduction target by 2030 and carbon neutrality by 2050





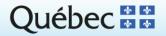
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OFFSET CREDITS Background

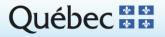


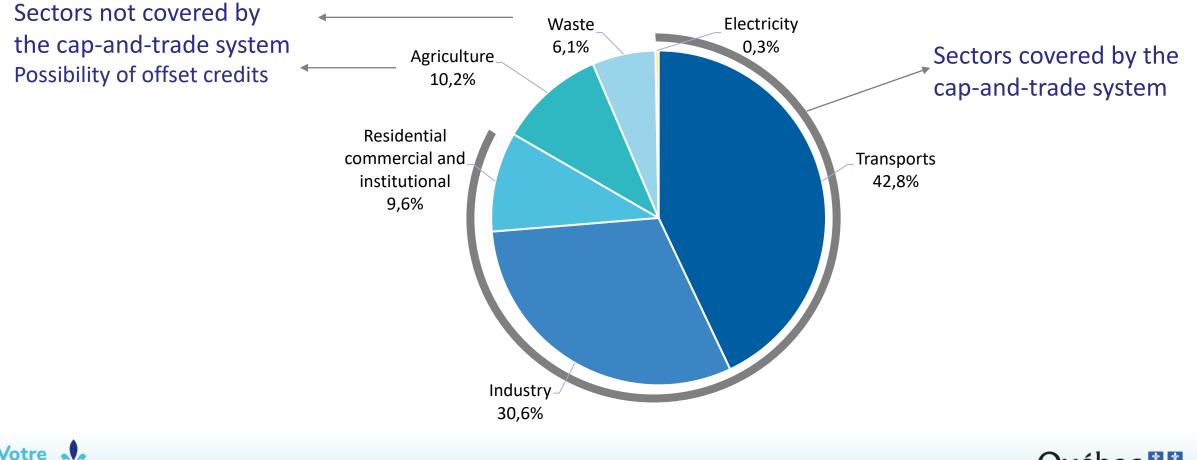


Market mechanism, complementary to the cap-and-trade system

- Allows promoters to carry out:
 - GHG emission reduction projects or
 - projects removing CO₂ from the atmosphere
- Projects must be carried out:
 - on a voluntary basis and
 - in sectors or emission sources not covered by the C&T compliance obligations
 - Examples: agriculture, waste management, forestry, etc.





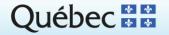


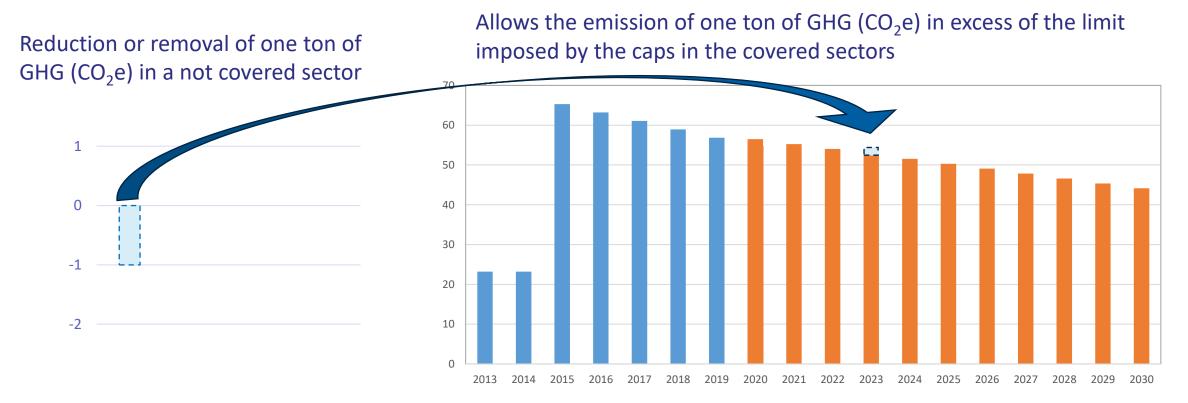
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- A promoter who carries out a GHG emission reduction project obtains offset credits that can be sold to an emitter regulated by the cap-and-trade system, who will use them to meet its compliance obligations.
 - 1 offset credit = reduction of one metric ton of CO₂ equivalent (CO₂e)



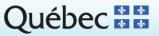




Since offset credits are issued "beyond" the GHG emission caps, the achieved reduction in a not covered sector by the cap-and-trade system enables the emission of one more ton in the covered sectors

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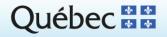
Background Objectives of the offset component

- Reduce compliance costs for emitters
 - by the implementation of projects generating real, additional, permanent, and verifiable and verified GHG reductions in sectors or sources of activity wich are not covered by cap-and-trade system.

Promote projects to reduce GHG emissions and to remove CO₂ from the atmosphere

- by supporting the deployment of new low-carbon technologies or practices through the sale of offset credits.
- Encourage investment
 - for carrying out projects to reduce GHG emissions and remove CO₂ from the atmosphere in Québec





Background Two types of offset projects

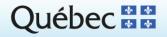
1. Project that reduces GHG emissions into the atmosphere by destroying GHGs

Examples: landfills methane, gases contained in refrigeration, freezing and airconditioning equipment (halocarbons)

In all cases:

- GHGs are destroyed and emission reductions are definitive and therefore permanent no risk of reversibility
- Environmental integrity is assured





Background Two types of offset projects

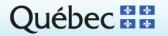
2. Atmospheric CO₂ removal project

*Examples: Afforestation or reforestation; CO*₂ *capture and storage in geological formations*

In all cases:

Unlike emission reduction projects, time plays a critical role in removal projects, as the cooling effect of removing a ton of CO₂, to generate one offset credit and offset the emission of a ton of GHGs, will only be achieved if the CO₂ is kept out of the atmosphere for a very long period of time, e.g. 100 years.



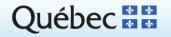


Cap-and-trade system regulation requirements

Limit on the use of offset credits for compliance

- The total quantity of offset credits that an emitter may use to cover the GHG emissions of its covered establishment cannot exceed **8%** of the GHG emissions to be covered for the compliance period.
- Reason for setting a usage limit:
 - Ensure that the majority of the reductions required to achieve our objectives will take place in sectors directly covered by the cap-and-trade system compliance obligation.



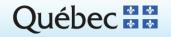


Cap-and-trade system regulation requirements

Requirements to be met for offset credit projects

- A GHG emission reduction or atmospheric CO₂ removal must be:
 - Additionnal
 - Real/quantifiable and quantified
 - Permanent
 - Verifiable, verified and unique
- To transpose these requirements into regulatory terms, "protocols" or "ministerial regulations" have been established



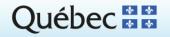


Regulatory framework

Regulatory framework evolution

- **2013-2021:** All offset protocols were included in the appendix in the cap-and-trade regulation.
- En 2021: Reform of the regulatory framework
 - Cap-and-trade regulation: addition of new sections
 - Development of ministerial regulations for offset project types to replace protocols





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Background

Regulatory framework

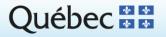
Regulations in force

- Regulation respecting landfill methane reclamation and destruction projects eligible for the issuance of offset credits (replacing Protocol 2)
- Regulation respecting halocarbon destruction projects eligible for the issuance of offset credits (replacing Protocol 3)
- Regulation respecting afforestation and reforestation projects on privately owned land eligible for the issuance of offset credits (new)

Protocols still in force and temporarily kept as appendices in the capand-trade regulation

- Protocol 1 Destruction of CH₄ from captured from manure storage facilities
- Protocol 4 Destruction of CH₄ from a drainage system in coal mines
- Protocol 5 Destruction of CH₄ from ventilation air in underground coal mines

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Background Work in progress

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Under development

- Draft regulation respecting manure anaerobic digestion projects
 - Public consultation held from April 5 to May 22, 2023
 - Review of the received comments is in progress. Enactment of the regulation is expected before the end of the year.
- Draft Regulation to amend the Regulation respecting halocarbon destruction projects
 - Public consultation held from August 23 to October 6, 2023
 - Review of the received comments is in progress. Enactment of the regulation is expected during the winter of 2024.

Under feasibility and potential analysis

- Fuel substitution in the maritime transport sector
- Improvement of agricultural fertilizer application practice

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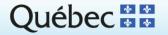
Current status of offset credits

Projects registered and offset credits issued in Québec as of today

- 23 projects registered/submitted, 20 having generated offset credits
- A total of 1,481,681 offset credits issued by the Québec government for projects carried out in Québec
- Information and documentation on projects, promoters and issued credits are available on the website, in the Offset Credit Projects Register:

https://www.environnement.gouv.qc.ca/changements/carbone/creditscompensatoires/registre_creditscompensatoires-en.htm





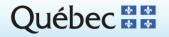
Current status of offset credits

Projects registered and offset credits issued in California as of today

- More than **500** projects registered, the majority having generated offset credits
- A total of 253,765,030 offset credits issued by California for projects carried out in the United States (not only in California)
- Information and documentation on projects, promoters and credits issued in California are available on this website:

https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program





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Background Current status of offset credits

Offset credits used for compliance by Québec's emitters									
	Total of emission	Offset credits (t CO ₂ e or %)							
Compliance period	allowances surrendered (t CO ₂ e)	Québec	California	Total	Percentage of offset credits for compliance	Proportion of California credits over total credits used	Proportion of Québec credits over total credits used		
2013-2014	36,664,703	-	298,812	298,812	0.8%	100%	0.0%		
2015-2017	176,145,518	585,134	5,503,021	6,088,155	3.5%	90.4%	9.6%		
2018-2020	178,178,929	388,051	13,143,303	13,531,354	7.6%	97.1%	2.9%		
Three-period total	390,989,150	973,185	18,945,136	19,918,321	5.1%	95.1%	4.9%		





Overview of offset credits in other regulated markets

Regulated market	Limit on use of offset credits
California	Before 2021: 8% of the compliance obligation/year 2021-2025: 4% of the compliance obligation/year 2026-2030: 6% of the compliance obligation/year 50% must come from projects providing DEBs ¹
Canada (federal)	Up to 75%. Output-Based Pricing System Regulations (OBPS)
Mexico	Up to 10% of the compliance obligation
European Union	No offset credits
New Zealand	No offset credits
New-York	No offset credits
South Korea	In phase 3, limited to 5% of the compliance obligation
Regional Greenhouse Gas Initiative (RGGI)	Up to 3.3% of the compliance obligation until 2030

¹ DEBs: Direct Environnemental Benefits in the state **Votre** gouvernement

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ROLE OF OFFSET CREDITS AND ITS CONTRIBUTION TO ACHIEVING QUEBEC'S OBJECTIVES





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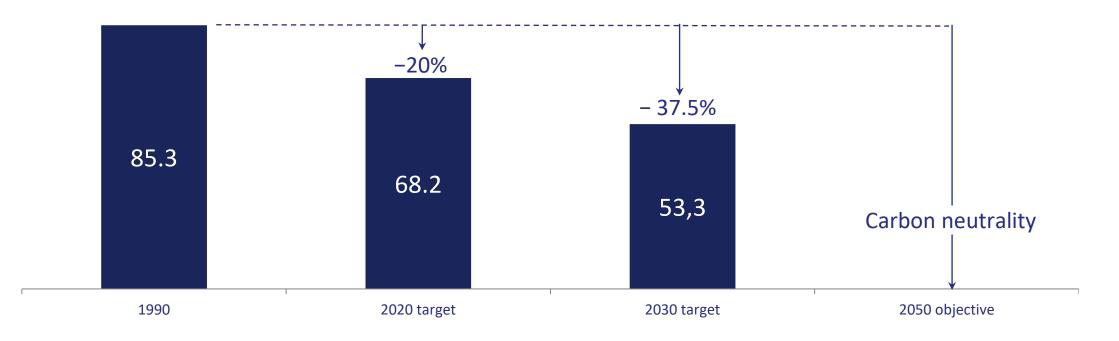


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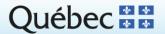
Reminder of Québec's objectives

GHG emission reduction targets

 1990 emissions, reduction targets and objectives (in millions of tons of CO₂ equivalent)







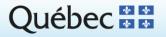
Role of offset credits

Reduce compliance costs



- Offset credits allow emitters to offset up to 8% of their GHG emissions by the implementation of reduction projects in sectors or sources of activities not covered by cap-and-trade system
- Reductions resulting from offset projects are usually less expensive than reductions achieved in the covered sectors
- Since offset credits are issued "beyond" the GHG emission caps, the reduction achieved in a sector not covered by the cap-and-trade system enables the emission of one more ton in the covered sectors, which results in a null impact in achieving Québec's GHG emissions reduction target.

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Options for the 2027-2029 compliance period

Limit on the use of offset credits for compliance

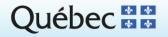
1. Status quo

- 2. Reducing the limit on the use of offset credits
 - For example, reduce from 8% to 4% for the 2027-2029 period
- 3. Restrict the use, in whole or in part, of offset credits to projects providing Direct Environmental Benefits (DEBs) in Québec only, or in Québec and California

Objectives:

- Incentive for emitters to reduce emissions in their own facilities
- Reducing the limit on the use of offset credits will result in increased reductions in the sectors of activities covered by the cap-and-trade system





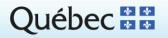
Options for the 2027-2029 compliance period

Limit on the use of offset credits for compliance

Your opinion

- In order to encourage reductions in Québec by 2030, should we review the limit on the use of offset credits?
- What would be the benefits of changing the usage limit, and why?
- What would be the issues involved in changing the usage limit and why?
- Do you see positively the idea of distinguishing offset projects with a direct environmental benefits (DEBs) in Québec from other offset projects?
 - If so, how much of the usage limit should be attributed to offset credits generated by DEBs projects in Québec?
- Do you have any other comments or options regarding the offset limit?





Options for post-2030 period

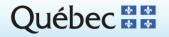
Role of offset credits in achieving Québec's objective

- 1. Assess the possibility of converting the offset component into a GHG emission reduction or CO_2 removal purchase program
- 2. Maintain the current regulatory framework for the implementation of projects eligible for a GHG emission reduction or CO_2 removal purchase program

Objectives:

- Ensure that GHG emission reduction and CO₂ removal projects carried out in Québec contribute directly to achieving the target
- Promote the establishment of a price more aligned with the cost of GHG emission reduction and CO₂ removal projects carried out in Québec





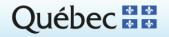
Options for post-2030 period

Role of offset credits in achieving Québec's objective

Your opinion

- What do you think about the previous proposals?
- Are you in favor of changing the offset component into a GHG emission reduction or CO₂ removal purchase program in order to contribute more directly to achieving Québec's objectives?
- Do you have any other comments or options regarding the role of offset credits for the post-2030 period?



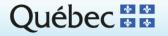




Reminder

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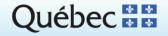
Next steps

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November 16 2023	Pre-consultation webcast on emission allowance caps and market control mechanism to receive feedback from stakeholders
By December 2023	Pre-consultation webcast on carbon sequestration and new green energies in a market context to receive feedback from stakeholders
Winter 2024	If applicable, publication of a draft regulation or other legislative instrument (e.g. Order in Council)
Summer 2024	If applicable, issue regulation or other legislative instrument (e.g. Order in Council)

To be informed of upcoming events, visit our web page: <u>Assessment of the operating parameters of the Cap-and-Trade System (gouv.qc.ca)</u>





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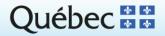
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Question period





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Overview of offset credits

Offset credits issued by California and Québec¹

Offset issued credits by California										
Period		2004-2012	2013-2017	2018	2019	2020	2021	2022	2023	Total
DEBs	California	7,981,124	16,387,432	1,883,362	5,543,916	1,320,215	2,960,199	1,198,531	0	37,274,779
DEBS	Other States	11,860,861	13,956,633	2,309,581	3,773,641	1,818,764	1,427,488	935,728	333,531	36,416,227
Non-DEBs		0	105,622,878	26,651,166	24,127,936	9,728,467	9,176,381	3,894,448	872,748	180,074,024
TOTAL		19,841,985	135,966,943	30,844,109	33,445,493	12,867,446	13,564,068	6,028,707	1,206,279	253,765,030
Offset issued credits by Québec										
то	TAL	0	563,993 (2015-2017)	114,190	85,234	113,309	175,674	251,534	177,747	1,481,681



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Overview of offset credits

Offset credits issued by project type²

Offset credits issued by California

ODS	Livestock	Forest	Coal mine methane	Total		
25,809,996	9,121,140	206,166,213	12,667,681	253,765,030		

Offset credits issued by Québec

Landfill methane	Halocarbon destruction	Total				
789 976	691 705	1 481 681				

² Data as of October 19, 2023



