



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

Pre-consultations

September 27, 2023



Webcast Logistics

- Presentation
 - This presentation is available online on the [Assessment of the operating parameters of the Cap-and-Trade System Web page](#)
- Questions period during the webcast
 - Submit questions in writing during and after the presentation
 - Questions will be posted in the "Q & A" section of the webcast screen and read by the moderator at the end of the presentation



Submitting comments

- Comments must be submitted in writing, **before October 20, 2023**, using the web form
 - The web form is available online on the [Assessment of the operating 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 - Only the e-mail address will not be published



Agenda

- Reminder of the objective of the approach
- Publication of market data
- Duration of compliance periods and possibility of partial compliance
- Modification of the global warming potentials (GWP)
- Next steps
- Questions period



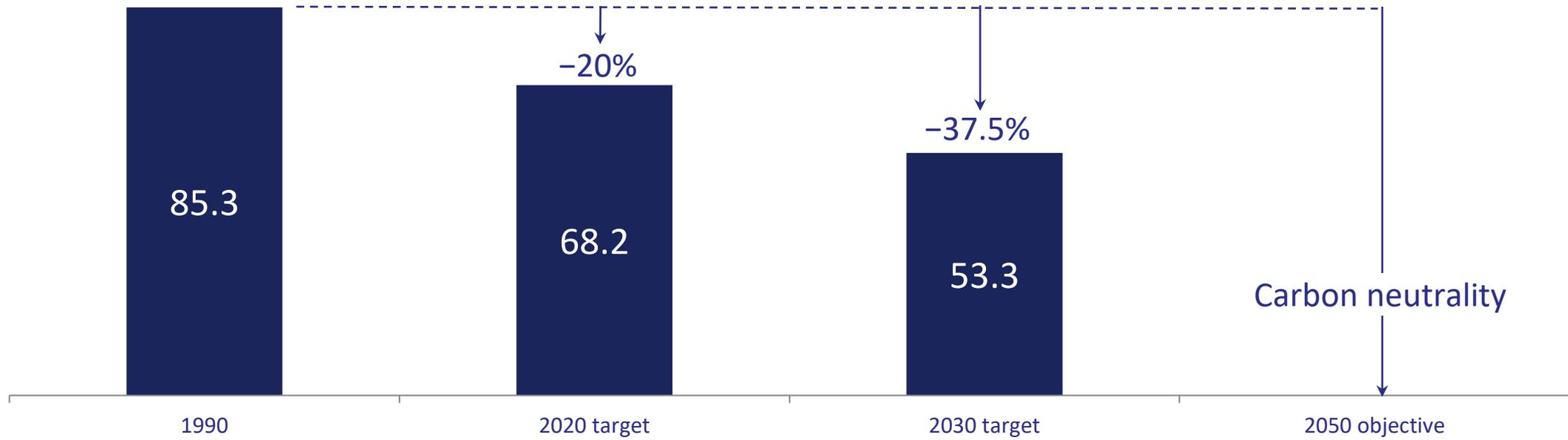
Objective of the approach

- 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
- Contribute to achieving carbon neutrality by 2050



Québec's GHG emission reduction targets

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





Publication of market data

Objectives

- Improve transparency
- Promote a better understanding of the cap-and-trade system by all stakeholders



Publication of market data

Cap-and-trade system regulation requirements

- List of covered emitters and registered entities for the cap-and-trade system (section 35)
- Quantity of emission units allocated without charge and list of beneficiary emitters (section 43.1)
- Auction notices (section 45)
- Auction summary results reports (section 55)
- Sale by mutual agreement by the minister notices (section 57)
- Sale by mutual agreement by the minister summary results reports (section 64.1)

Publication of market data

Data currently available

The Carbon Market, a Green Economy Growth Tool!

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

The Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) and the California Air Resources Board (CARB) are currently assessing possible adjustments that may be made to the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (Regulation) and, consequently, to the operation of the carbon market early next year.

For more information or to access related documents [click here](#).

Putting a price on carbon is a mechanism used to regulate greenhouse gas (GHG) emissions in the fight against climate change. The aim is to encourage companies and citizens to innovate and change their behavior in order to reduce GHG emissions.

In 2013, Québec set up a cap-and-trade system for greenhouse gas emission allowances (C&T system) to fight climate change. In 2014, Québec linked its system to California's, thereby creating the largest carbon market in North America and the first to be designed and managed by sub-national governments in different countries.

This carbon market is a green fiscal tool that simultaneously allows for reducing GHG emissions and developing strategic sectors for the Québec economy (clean technology, energy efficiency, transportation electrification, etc.).

- [The actors involved in the C&T system](#)
- [How the C&T system works](#)
 - [Caps](#)
 - [Compliance](#)
 - [Buying emission allowances](#)
- [Reinvesting revenues in Quebec's fight against climate change](#)
- [The value of an emission allowance](#)
- [The contribution of the joint Quebec-California carbon market to meeting GHG emission reduction targets](#)
- [Learn more](#)

C&T System Details

- [Mandatory Reporting of Certain Emissions of Contaminants into the Atmosphere](#)
- [C&T System Registration](#)
- [Opt-in](#)
- [Allocation of Emission Units without Charge](#)
- [Auctions](#)
- [Sales by Mutual Agreement by the Minister](#)
- [Offset Credits](#)
- [Early Reduction Credits](#)
- [Emission Allowance Transfers](#)

[The Carbon Market, a Green Economy Growth Tool! \(gouv.qc.ca\)](http://gouv.qc.ca)



Publication of market data

Data currently available

The Carbon Market Documentation

Publications and forms

- [Registration to cap-and-trade system](#)
- [Allocation of emission units without charge](#)
- [Emission allowance holding and trading](#)
- [Compliance](#)
- [Auctions and sales by mutual agreement with the Minister](#)
- [Offset credits](#)
- [Market Notice](#)
- [WCI](#)
- [General](#)

Regulations

Publications and forms

Registration to cap-and-trade system

- Forms and Sample Letter Templates
 - [Application Form to Opt-in](#) (PDF, 1.2 MB)
 - [Attestation of Verification of Identity and Designation](#) (PDF, 1.3 MB)
 - [Financial Institution Confirmation Letter \(sample\)](#) (PDF, 90 KB)

[Documentation - Carbon market \(gouv.qc.ca\)](http://gouv.qc.ca)

Publication of market data

Data currently available

- Auction notices and detailed instructions
- Sale by mutual agreement by the minister notices and detailed instructions
- Carbon pricing ratio
- Halocarbon purchases and sales in Quebec
- Annual auction reserve price notice and budget
- Covered emissions of the establishments subject to the cap-and-trade system
- Detailed auction requirements and instructions and auction examples
- QC and CA auction price history
- Inventory of GHG
- Inventory of principal air contaminant gases
- List of registered entities
- Accounting mechanism for compliance instruments traded + example + Report on the Net Flow
- Quantity of emission units allocated without charge and list of beneficiary emitters
- Compliance reports
- Offset credits registry
- GHG registry
- Principal air contaminant gases registry
- Auctions results
- Sales by mutual agreement by the minister results
- Auction proceeds allocated to the Electrification and Climate Change Fund
- Compliance Instruments balance report
- Summary of transactions



Publication of market data

Examples of other systems

- European Union
 - Free allocation by sector
 - Aggregate production data used to determine the free allocation
 - Transaction list (non-aggregated, non-nominative)
- Regional Greenhouse Gas Initiative (RGGI)
 - Account information (e.g. account representatives)
 - Transaction list (non-aggregated, non-nominative)
- United Kingdom
 - Free allocation by emitter

Publication of market data

Suggestions

- New data :
 - Distribution of annual budgets: reserve, free allocation, auction
 - Free allocation by emitter or by sector of activity
 - Emitters' emissions intensity evolution
 - Emitters' emissions by type (process vs. combustion)
 - Intensity target by sector
 - List of all transactions with non-aggregated and non-nominative prices
- Improved presentation:
 - Emitters' emissions history by sector and by emitter over time
 - Historical auction data
 - Offset credits



Publication of market data

Your opinion

- Are any of the previous suggestions of interest or use to you?
 - If so, which ones?
- Do you see any issues with the data proposed previously being made public?
 - If so, which data raises an issue and why?
- What new data should be published and in what form (raw data, static reports, interactive board)?
- How else could the data currently available be presented?

Duration of compliance periods and possibility of partial compliance

Objectives

15

- Ensure data reconciliation for reporting in line with GHG emission reduction target years
 - Calculation of net flows of compliance instruments traded
- Better distribution of emission allowances surrender over time
- Support the active participation of emitters with more frequent compliance events

Duration of compliance periods and possibility of partial compliance

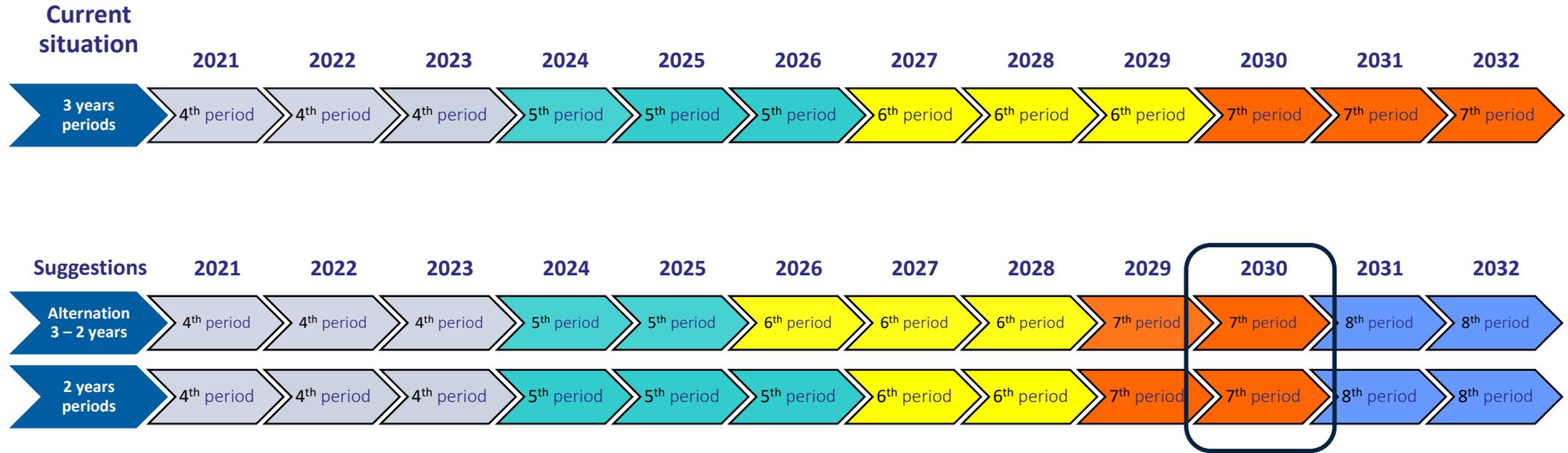
Suggestions

16

- Evaluate whether the frequency of compliance events needs to be modified, for example to be consistent with the years of the GHG emission reduction targets and objectives (2030 and 2050)
- Evaluate the possibility of implementing partial annual compliance events, for example requiring the surrender of emission allowances to cover 30% of the previous year's emissions

Duration of compliance periods and possibility of partial compliance

Suggestions



Duration of compliance periods and possibility of partial compliance

Your opinion

18

- Should emitters have to surrender emission allowances every year?
 - If so, what proportion of annual emissions?
- Would shorter compliance periods support a more active participation of emitters in the cap-and-trade system?
- What would be the ideal length of a compliance period?
 - Should all compliance periods have the same duration?

Modification of the global warming potentials (GWP)

Background

19

- Definition of global warming potential (GWP)
 - A GWP is a value assigned to a GHG to compare its warming capacity with the one of carbon dioxide (CO₂)
 - The values used are GWP over a 100-year horizon
- Setting GWP values
 - GWP values are determined by the IPCC (Intergovernmental Panel on Climate Change).
- Update of GWP values by IPCC
 - Last update correspond to the IPCC 5th Assessment Report (2014)
 - Previous GWP values correspond to the 4th report (2007) and 2nd report (1996)
 - The transition to the GWPs of the 5th IPCC report is required by international GHG quantification standards starting with the 2022 national inventories.

Modification of the global warming potentials (GWP)

Evolution of GWP for certain GHGs

Greengas house	Formula	GWP 2 nd IPCC report	GWP 4 th IPCC report	GWP 5 th IPCC report
Carbon dioxide	CO ₂	1	1	1
Methane	CH ₄	21	25	28
Nitrous oxide	N ₂ O	310	298	265
Sulfur hexafluoride	SF ₆	23,900	22,800	23 500
Nitrogen trifluoride	NF ₃	17,200	17,200	16 100
HFC-23	CHF ₃	11,700	14,800	12 400
HFC-32	CH ₂ F ₂	650	675	677
HFC-125	C ₂ HF ₅	2,800	3,500	3 170
Perfluoromethane	CF ₄	6,500	7,390	6 630
Perfluoroethane	C ₂ F ₆	9,200	12,200	11 100

Sources: https://ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf
<https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/greenhouse-gas-data-unfccc/global-warming-potentials>

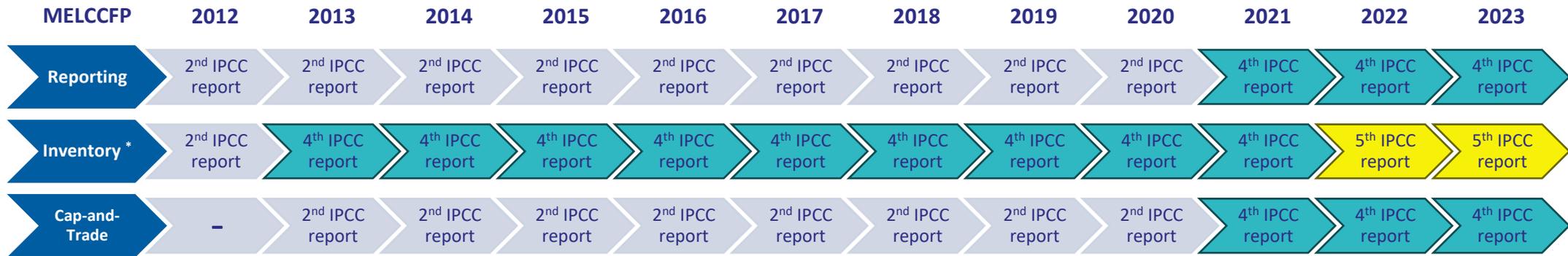
Modification of the global warming potentials (GWP)

Objectives

- Evaluate whether the GWPs of the 5th IPCC report should be integrated into the cap-and-trade regulation, through the RMRCECA, in order to harmonize them with Quebec's GHG inventory.
- Evaluate whether a change in GWP should lead to a change in historical data and average actual intensities (2017-2019 averages or more recent)

Modification of the global warming potentials (GWP)

GWP used for reporting, the inventory and the cap-and-trade system



* There is a delay between the year of the emissions and the publication of the inventory (e.g.: the 1990-2013 inventory was published in 2015)

Modification of the global warming potentials (GWP)

Potential impact of a change in GWP on the cap-and-trade system

23

- Different emission data between those published in the inventory and those published by the cap-and-trade system
- Impact on the emissions to be covered by emitters
- Impact on free allocation via historical data
- Caps
 - Impact on the number of emission units put into circulation
 - Impact on the holding limit

Modification of the global warming potentials (GWP)

Potential impact of a change in GWP on the cap-and-trade system

24

- As an example, the switch to the values of the 5th IPCC report represents:
 - An increase in emissions of 0.61 Mt CO₂ eq. (0.8%) in 2020 for the Quebec's GHG inventory.
 - An average variation of -0.5% in emissions to be covered by emitters based on 2021 emissions data.
 - More than 1% for around ten establishments

Modification of the global warming potentials (GWP)

Your opinion

25

- Are there any issues in having different emission data between those published in the inventory and those published by the cap-and-trade system, in the case of different GWPs?
 - If so, why?
- Should historical data (used to calculate the free allocation) be modified each time the GWPs are changed?
 - If so, should it be adjusted for all establishments, or only for those whose change in PRP has a significant impact on the coverage obligation?
 - If the adjustment only applies to certain establishments, what should the revision threshold be?



Next steps

- Until nov. 2023 Pre-consultations webcasts by topics 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:

[Assessment of the operating parameters of the Cap-and-Trade System \(gouv.qc.ca\)](https://gouv.qc.ca)



Reminder

- Comments must be submitted in writing, **before October 20, 2023**, using the web form
 - The web form is available online on the [Assessment of the operating 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



Questions period