

Québec Assessment of the Operating Parameters of the Cap-and-Trade System: Consultation Response

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IETA strongly supports The Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) in their assessment of the operating parameters of the cap-and-trade system to ensure long-term effectiveness and support of the system in driving towards the province's ambitious net zero target. IETA's comments are structured around the thematic areas and questions outlined in the [consultation response form](#) from the 5 December workshop, focusing on issues related GHG storage:

- Regulations
- Technologies
- General

Regulations

- **Are the regulations in place sufficient to allow storage projects? Should we regulate the sectors that could use storage? What do you think of the proposed amendments to the Regulation respecting the mandatory reporting of certain emissions of contaminants into the atmosphere concerning the subsection of capture and storage activities?**

IETA's "High-Level Criteria (HLC) for Carbon Geostorage Activities", <https://www.ieta.org/initiatives/high-level-criteria-for-carbon-geostorage-activities/>, are a set of principles to govern the development of tradable reductions and removals using technology-based carbon sink enhancements. IETA carried out a year-long consultation with business stakeholders and a series of expert workshops to develop a set of principles to guide developers, investors, and host countries in ensuring that carbon geostorage projects deliver real, permanent, and verifiable reductions and removals. We strongly advise Quebec to review the HLC, available on IETA's website, in their assessment of the regulatory framework for GHG storage.

Broadly, the regulatory framework should provide certainty on tenure ownership, processes to acquire rights for injection and storage, information on measurement, monitoring and verification requirements and a mechanism to address long-term liability and permanence. These are essential QA/QC checks to support the selection of high-quality storage sites and underpin the longer-term risks of reversals, fundamental to underpinning creditable projects utilising carbon geostorage (e.g. CCUS). They are also essential requirements to the national level reporting of Canada's GHG emissions and removals in respect of progress towards the Paris Agreement goals.

IETA suggests Quebec incorporates the model developed by Alberta's Ministry of Environment and Protected Areas whereby long-term liability transfers to the provincial



government once the project proponent demonstrates “storage performance is consistent with expectations for permanent storage.”

From Alberta’s “**Quantification Protocol for CO2 Capture and Permanent Storage in Deep Saline Aquifers**”: “The project developer retains liability for the carbon capture and storage project and sequestered carbon until a closure certificate is issued by Alberta Energy or the Alberta Energy Regulator. Once a closure certificate has been issued, liability for events resulting from these activities is transferred from the project developer to the Government of Alberta according to terms as detailed in the relevant legislation and regulations.” These measures are essential to building investor and public confidence in the technology.

Quebec should facilitate alignment and recognition with the federal government for project eligibility under the CCUS Incentive Tax Credit (ITC) legislation, as it looks to develop offset protocols and build out its regulatory framework. Given the high cost of CCUS technology, any crediting opportunities for CCUS in the province should be viable to be combined with the federal ITC.

Regarding the “Mandatory Reporting of Certain Contaminant Emissions to Air Regulations”, accounting for CO2 and its permanent storage or utilization is important to provide an investment signal to decarbonize. Quebec’s intent to account for the capture, storage, re-use or elimination, and transfer of CO2 emissions is critical given the geological storage limitations in the province.

- **In your opinion, if an establishment transferred GHGs to a second establishment which would recover them, but which emitted part of them, who should be responsible for the CO2 emissions associated with the recovery process? The operator of the factory which generated the CO2 or the establishment receiving the transfer for recovery?**

It is imperative that GHG emissions accounting is as accurate as possible. GHG emissions occurring after the point of transfer or related to the utilization process should be accounted for by the emitting facility (i.e., the facility receiving the transfer of CO2 for utilization). The net emission reduction benefit claimed by the party capturing the CO2 should be determined at the point of transfer to the using party.

In the case where the party capturing the CO2 contracts with another party for the CO2 to be permanently stored, the capturing party will be required to ensure the safe transfer to a permitted transport network and storage site. The party responsible for storage will be responsible for any emissions associated with storage, as well as any physical leaks of CO2.

When considering the development of a protocol for CCUS, it is best to allow the project proponents to create their own **benefit sharing agreements** throughout the CO2 utilization and storage process. Again, IETA recommends **looking to Alberta’s quantification protocol for CO2 capture and permanent storage** in deep saline



aquifers for guidance. Additionally, it will be critical to facilitate a “hub and spoke” model, (one injection facility that takes in CO₂ from many sources) in the protocol design.

➤ **For you, what does permanence mean and what controls and monitoring should be put in place to ensure that the storage is permanent?**

Based on existing methodologies, expert consultation, and global reporting standards, **IETA’s HLC proposes six (6) methodological components**, describing the rules and procedures for quantifying emission reductions and removals arising from creditable geostorage activities:

- Applicability Conditions
- Project Boundary & Leakage
- Baseline
- Additionality
- Non-Permanence & Liability
- Monitoring

and ten (10) safeguards, that identify and manage the specific impacts and potential risks associated with carbon geostorage (including carbon reversal):

- Significant and cost-effective for national climate mitigation
- Aligned with national development priorities and policy aims
- Public acceptance
- Legal basis for injection and storage
- Effective site selection and development
- Robust oversight of site operation and closure
- Liability for carbon reversal
- Risk and safety assessment
- Environmental and social impacts
- Sustainability

The handling of non-permanence and liability relates to both methodological design and the safeguards for safe carbon geostorage. As such, quantification methodologies must be underpinned by the safeguards. IETA strongly advises Quebec to review the HLC available on IETA’s website when building out their regulatory framework related to permanence and monitoring requirements.

➤ **With regard to stored CO₂, how should their accidental releases be treated under RDOCECA and the cap-and-trade system for emissions rights (SPEDE)?**

Once again, IETA recommends looking to the guidance provided in Alberta’s quantification protocol for CO₂ capture and permanent storage in deep saline aquifers which requires an engineering estimate of accidental emissions once a leak has been identified.



Technologies

- **In your opinion, what technologies are most likely to allow permanent removal of GHGs from the atmosphere? Which technologies should be prioritized for the development of quantification protocols?**

There are many technologies that support permanent removal of GHGs from the atmosphere. **IETA encourages Quebec to develop a wide range of protocols.** Providing a wide range of opportunities allows regulated entities and project developers to optimize for their unique circumstance. Firms and industries do not have equal opportunity in removals technologies, due to factors like geological constraints.

Quebec could **consider adapting a geological storage offset protocol from Alberta**, which has been in use for many years, or could adapt the CCUS quantification methodology from the federal Clean Fuel Regulations. Quebec also has significant opportunities for CO₂ utilization which could be incorporated into the protocol.

Direct Air Capture (DAC) and Bioenergy with carbon capture and storage (BECCS) are not specifically mentioned in the consultation materials. Currently there is no incentive under cap-and-trade to promote biogenic CO₂ capture which may be an additional avenue to explore. **IETA encourages Quebec to enable companies to generate credits for utilization of captured biogenic CO₂.**

In addition to CCUS, **Quebec should consider developing or adopting carbon offset protocols to incentivise DAC and BECCS** and, could also consider protocols for biochar and enhanced rock weathering as emergent novel CDR methods. We also encourage Quebec to also consider **enabling afforestation and reforestation** projects on public lands as forests play a meaningful role in removing CO₂ from the atmosphere.

Given the time and complexity of new protocol development, we encourage the province to consider adopting or adapting existing protocols where possible from existing federal systems, other CCUS-related protocols developed by provincial governments and ICROA-endorsed carbon crediting programmes in the voluntary carbon market. Notably, IETA encourages Quebec to look to the forthcoming Federal **“Direct Air Carbon Dioxide Capture and Sequestration”** protocol.

Broadly, Quebec should facilitate a competitive process for regulated facilities and project developers to undertake greenhouse gas storage projects. Quebec’s offset protocol system creates an efficient market mechanism to enable this competitiveness. It will be critical for Quebec to maintain the parameters of the system to ensure that large scale technological sequestration can be supported by the cap-and-trade system.

It will be critical for the province to expand the number of available protocols in Quebec to incentivize domestic mitigation and expand supply. Only two protocols have been used to generate offsets in Québec since the creation of the program.



Further, Quebec can further bolster the incentives by directly purchasing offsets or removals. Any purchase program should be in addition to the existing offset protocol framework to maximize the potency of the market forces and government action. IETA suggests Quebec look to British Columbia's carbon neutral government program as an example of how this could be done in practice.

General

- **Should we limit the quantity of GHGs that can be stored in order to promote emissions reductions? What do you think of the social acceptability of geological storage?**

IETA strongly opposes limitations on the volumes of CO₂ storage. Quebec should facilitate a competitive and efficient framework for allocating storage rights of CO₂ emissions. This would allow businesses to effectively determine the feasible and required quantity of CO₂ injection as a direct response to the regulatory environment. However, it will be critical that Quebec maintains a robust legal and regulatory framework for safe storage to ensure the permanence of injected CO₂. We again suggest looking to IETA's HLC for guidance in these respects.

Federal and provincial governments have widely accepted CCUS and other removal technologies as pathways and methods to effectively reduce emissions. This is evidenced by the development of investment tax credits, protocols, and regulatory frameworks safe and environmentally-sound development and deployment of these technologies. The support of Quebec would further help promote the social acceptability of geological storage. Further, Quebec could enhance social acceptance by completing independent studies on the safety and effectiveness of CCUS schemes.

- **Given that geological storage is non-renewable, should we limit the quantity of GHGs that can be stored per year by an emitter, and by Quebec? Should sectors that cannot be decarbonized be prioritized for the use of geological storage or should any establishment have access if they wish and can afford it?**

IETA advises against favoring specific industries when considering the deployment of removal technologies, emphasizing that geological constraints, access, and various other factors play a more crucial role in determining viability. Introducing an additional layer of complexity would be counterproductive. Instead, we propose that Quebec explores hub models. Alberta is utilizing a competitive process to grant carbon sequestration rights, fostering the creation of carbon storage hubs that can be accessed by a variety of companies who have captured CO₂ but don't have the means of injecting it on their own.



Conclusion

Once again, we appreciate this opportunity to record IETA's insights and recommendations to inform the assessment of the operating parameters of the Cap-and-Trade System. We look forward to future engagements with MELCCFP. If you have questions or require further information about IETA's insights and recommendations, please contact **Sam Grootelaar** (grootelaar@ieta.org).

About IETA

IETA's core objective is to build robust policy and market frameworks for reducing greenhouse gases (GHGs) at the least cost to businesses and consumers. Our proven record as the multi-sector business champion on all aspects of high-integrity carbon market design and accounting means that IETA members are at the global forefront of policy evolution and innovation. Our 300+ member companies include global leaders across power, oil and gas, industry (cement, aluminum, chemical, mining etc.), agriculture, as well as leading firms in the GHG data verification and certification, brokering and trading, legal, finance, technology, and consulting businesses. With deep relationships across the world's key policy centers and commercial arenas, IETA is the collective voice for the full range of businesses involved in carbon markets and carbon management worldwide.

IETA has deep domain expertise in carbon market policies and operations. We have been an accredited observer to the UNFCCC for over 20 years, most recently providing design support and advocacy for Article 6 of the Paris Agreement. A cornerstone of IETA's experience in carbon markets has been our ongoing involvement in Canadian carbon markets and related climate policies. IETA's Canada Working Group focuses on advancing the private sector's engagement with domestic policy and reducing emissions through innovative and efficient policy solutions, like markets. It also promotes the private sector as a critical stakeholder and believes that market-based approaches are essential to generating the significant finance that is required to accelerate ambitious climate action, safeguard communities, and provide flexibility to ensure that strategic and economically efficient climate action can be pursued.

