



**Cement
Association
of Canada**

SUBMISSION

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ERO number: 019-8767 Feedback on Regulating Commercial-Scale Geologic Carbon Storage Projects in Ontario

Jennifer Keyes
Director, Development and Hazard Policy Branch
Ministry of Natural Resources and Forestry
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Peterborough, ON K9J 8M5
Via email: resources.development@ontario.ca

Dear Ms. Keyes:

On behalf of the Cement Association of Canada (CAC), I am pleased to provide feedback on the proposed framework to Regulate Commercial-Scale Geologic Carbon Capture Storage (CCS) Projects in Ontario.

Overall, Ontario's cement industry is pleased that the government is proceeding with developing a framework for CCS in the province. A framework and the corresponding regulatory approach will provide the necessary predictability and transparency for the development of CCS projects in Ontario. This clearly defined framework is vital for three key reasons:

First and foremost, it provides certainty to industry, in turn enabling the feasibility of projects to be explored. CCS projects require a longer lead time than traditional capital projects due to technologies and complexities of project design. A well-developed CCS project in the cement industry could take upwards of 5 years to reach a positive final investment decision. CCS projects also carry a greater price tag than traditional capital projects – to date, the average cost of a capital project in the cement industry is less than \$200 million (this includes the construction of a new cement plant), whereas the cost of a CCS project can be greater than \$1 billion. Regulatory certainty is therefore necessary to provide the industry the confidence and clarity it requires to consider the development of projects in the province, which in turn provides the benefits of bringing investment into Ontario and removing pollutants from the atmosphere.

As protector of the public good, it is essential that Ontario develop a robust and transparent regulatory framework to instill public confidence and ensure support for CCS in Ontario. The Government of Ontario has a unique and clear role in defining a regulatory framework to manage public assets and ensure appropriate and clear public stakeholder engagement. This also includes mechanisms for risk and cost sharing, including liability transfer back to the Crown, in management and protection of the public interest.

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Finally, a robust and transparent framework will attract investment into Ontario. To date, Ontario's 5 cement producers (the highest concentration of cement facilities in the country) have not been able to access Canada's Carbon Capture, Utilization and Storage Investment Tax Credit. The Government of Canada has committed to providing tax credit rates of 50% for investment in equipment to capture CO₂ in CCUS projects and 37.5% for investment in equipment for transportation, storage and use. This investment is essential for attracting foreign investment from parent companies into Ontario, however these tax credit rates decline significantly after 2030. Given the timeframe needed to develop CCS projects, it is essential that the Ontario government move quickly to deliver this framework, so that federal funding can be accessed by the province and the companies operating within it. We also recommend that the Ontario government invest in educating key stakeholders, such as landowners, and the public about the benefits and safety of CCS technology, which remains relatively misunderstood in some areas.

Canada's cement and concrete industry are investing in the technologies to maintain economic competitiveness now and into the future. This includes transitioning to new and less polluting fuel sources, enhancing industrial and material efficiencies, and championing the adoption of new concrete products through procurement policies and performance-based standards. Although these initiatives offer significant potential for increasing industry competitiveness while we seek to reduce pollutants, achieving **net-zero relies on the effective and reliable implementation of CCS technologies in Ontario, governed by a robust regulatory framework.**

We support the overarching approach outlined in the Discussion Paper and have addressed the questions posed, along with suggestions for additional design elements that support a strong, transparent regulatory framework.

Once again, thank you for the opportunity to provide input on this important initiative. We look forward to continuing our collaboration with the Government of Ontario.

Sincerely,



Adam Auer
President & CEO
Cement Association of Canada

Response to Consultation Questions:

- 1. Would initially scoping the framework to only allow commercial-scale projects to store CO₂ within saline aquifers and depleted oil and gas wells in southwestern Ontario at depths of at least 800m or more meet industry's current needs and maintain public comfort in the development of these projects?**

The CAC supports a staged approach to storage, and that the framework should focus on prioritizing access to storage in saline aquifers. Industry requires certainty and clarity on the regulatory approach to consider the development of CCS projects. Simply put, depleted oil and gas wells are not a homogeneous storage solution – each well would need to be tested and assessed on an individual basis to address viability. This process will take time and could be accomplished on a separate schedule from storage in saline aquifers. Prioritizing storage saline aquifers allows for the necessary time to assess the viability of depleted well storage, ensuring public safety and maintaining confidence, while at the same time providing the regulatory certainty industry needs to move forward with developing projects and technology with longer lead times.

- 2. Would you support using a competitive process to select projects looking to store carbon dioxide on Crown land? Why or why not?**

Yes, we would support a competitive process to select projects. Given Ontario's limited storage capacity potential and the need for CCS technologies to achieve emissions reductions in hard-to-abate industries like cement, it is necessary to have a rigorous and competitive framework that elicits highly qualified proposals and evaluates their feasibility. This will help ensure CCS projects are deployed in a timely, safe manner where they can have the greatest impact.

Ontario should consider developing competitive project selection process similar to Alberta's. This includes effectively evaluating project features through a well-defined and transparent process that assesses the proponent's safety record, operational expertise, regulatory experience, and financial history. The selection process must also evaluate the applicant's ability to effectively consult and engage with impacted stakeholders, cultivate partnerships, evaluate and mitigate risks and impacts, and assess emissions reduction potential.

3. How should proponents obtain rights to pore space? What are the benefits and challenges associated with adopting the models currently being used in western Canada and US States discussed above?

We support a framework where the pore space is vested and managed by the Ontario government in the public interest. With this approach, the government assesses the project's feasibility and, if deemed viable, enters into a tenure agreement with a proponent to manage and operate a carbon storage hub. This approach will ensure the necessary technical and safety expertise exists for storage hub management; maximize Ontario's limited pore space potential; and ensure effective oversight. By acting in the public's interest, the government provides certainty to both industry and Ontarians.

As is being explored in Alberta, the shared infrastructure of carbon storage hubs assists in cost and risk sharing between hub users and hub managers. Shared hubs can accommodate additional storage from proponents who may not have large enough volumes to warrant the investment in storage capacity alone –but as part of a group, the solution is significantly more viable.

It is also important that the framework address the broader issues of risk and cost sharing, including transferring liability back to the Crown. Without these essential design elements, we undermine the viability of CCS as an economic solution in Ontario.

4. Would a staged approach to authorizing carbon storage projects be desirable? If so, how should authorizations be staged?

A staged approach for authorizing carbon storage projects is supported. We endorse adopting a similar [authorization approach as Alberta](#), guided by three phases - evaluation, sequestration, and closure. Additionally, continuous monitoring and reporting throughout the project are essential to ensure ongoing compliance.

The timeline for implementing CCS projects is lengthy, often exceeding 5 years. While a staged approach can help expedite timelines, its success relies on a robust framework that clearly defines all project aspects, including monitoring, reporting, verification (MRV); technology and standards; and ownership. If these elements are well-defined in the regulatory framework, proponents may be able to bypass staging and proceed directly. The effectiveness of CCS projects is dependent on the quality of the framework. Furthermore, without an approved regulatory framework, Ontario industries are missing out on valuable funding opportunities through federal Investment Tax Credits, with the availability of such funding diminishing over time.

5. When and how should potential impacts to the agricultural land base and the agri-food network (e.g., operations, infrastructure, agribusinesses, etc.) be considered?

The regulatory framework must establish clear guidelines for informing and consulting with landowners.

It is important the framework outlines how impacts on agricultural productivity, soil, and water quality are assessed and by which designated professional.

This work should be supported by broader education of landowners and other stakeholders about the benefits and safety of CCS.

6. How should proponents of commercial-scale geologic carbon storage projects notify and engage with Indigenous communities and other parties who may be affected by their proposed projects?

The Government of Ontario has a vital and unique role in protecting the public interest. We recognize it is incumbent upon proponents to cultivate mutually respectful relationships with impacted community members.

We respect and uphold Ontario's duty to consult and commit to meaningfully engage in the process to and the procedural aspects of consultation the Government delegates to the third party as part of that process.

7. What operational controls should be put in place to help ensure commercial-scale carbon storage projects would be developed, operated, and decommissioned in a safe and responsible manner?

While this is outside of our scope of expertise, we support the clear definition of operational controls in the regulatory framework to provide the certainty required for projects to proceed.

8. Would allowing proponents to transfer responsibility for the long-term monitoring and stewardship of carbon storage projects to the Crown help ensure carbon storage projects, including the wells, geologic storage areas and carbon stored in geological formations, would be adequately cared for over the long-term?

Transferring long-term monitoring, stewardship, and liability of CCS projects back to the Crown is essential for ensuring sound public stewardship and management of carbon storage over the long term. The government is best positioned to protect the public good.

9. Would you support components of this framework being delivered by an external entity and if so, what components?

The policy framework must be defined by the government in the public interest and therefore, should not involve third parties. However, we support the implementation of the framework being delivered by external entities, such as specialized operators or hub managers.