**Ministry of Natural Resources and Forestry**

**Discussion Paper: Regulating Commercial-Scale Geologic Carbon Storage Projects in Ontario**

**ERO number 019-8767**

**Submitted Via the Environmental Registry of Ontario**

The Sarnia-Lambton Economic Partnership (SLEP) fully supports Ontario’s efforts to create a regulatory framework for commercial-scale geologic carbon storage projects in Ontario that would enable the development of technology-ready commercial-scale projects and the continued testing and demonstration of newer carbon storage technologies.

Branded as Ontario’s Hydrogen Hub, the Sarnia-Lambton area boasts the province’s largest cluster of hydrogen innovation and hydrogen producing and off-taking facilities, a top 3 ranked college in Canada for applied research with focused hydrogen capabilities, a specialized workforce with the technical capabilities required for hydrogen production, and the infrastructure and distribution capabilities essential to the development of the low-carbon economy.

Additionally, the Sarnia-Lambton is home to eighteen (18) of the fifty (50) largest emitters in Ontario, all of whom are seeking decarbonization solutions as part of a transformational shift to achieve net-zero by 2050. Sarnia-Lambton also, as identified by the Ministry of Natural Resources and Forestry has the potential geology to support carbon storage.

As the regional economic development agency for Lambton County, SLEP’s mandate includes fostering economic stability, growth, and diversification across the Sarnia-Lambton area, to enhance quality of life and create a vibrant place to live and work.

Currently, hydrogen in the region is produced via steam methane reformation (SMR) of natural gas, resulting in grey hydrogen. SMR is the most widely used technology for hydrogen production and is expected to continue to be one of the primary pathways going forward. However, with the Sarnia-Lambton area’s strong starting position, opportunities exist to achieve lower carbon intensities, and emissions reduction can be achieved from a transformative scenario capitalizing on the efficiency of scale presented by the region. Stakeholders believe that investment and growth in the low-carbon economy can be achieved by creating opportunities for local industry to do better with what they do well today based on an incremental and well-defined shift (ex. Grey 🡪 Blue 🡪 Green).

Many local industrial stakeholders have made commitments through global corporate strategies to pursue a global low-carbon hydrogen and clean fuel economy.

**What Industry Requires from a Regulatory Framework in Geologic**

**Clarity to Inspire Confidence**

In order to achieve low-carbon hydrogen goals, industry requires a framework that provides extreme clarity in order for capital expenditures to be made with complete confidence. There have been instances recently where regulations are changed due to pressure from outside sources with no avenue for industry input or appropriate timelines to comply. Industry needs clarity on who determines the regulations, as well as what the regulations are, and who can facilitate changes to them, with specific definitions for the circumstances that may result in changes. Assumedly it would be the Ministry of Natural Resources (MNR) or Ministry of the Environment, Conservation and Parks (MOECP).

**Certainty to Inform Long Term Investment**

As an economic development agency, we have often heard from all sizes of businesses that in Ontario and Canada there is a misconception by policy makers that the landscape is supportive and interested in business advancement and expansion. For Ontario to support mid- to longer term investment in the geological carbon storage arena, those investing in projects, special or commercial scale need to have certainty that policy won’t change in a timeline that is impossible to meet should different policy makers enter the mix. That is not to say that should science bear out need for change that it should be discarded. But incorporation of advancements in the way carbon can be stored would need to be done in collaboration with partners and project owners.

Long term commitment by the government will allow for faith in the commercialization space. Government must play a strong leadership role as has happened in other jurisdictions. SLEP recommends that regulations be locked in for a specific length of time to provide confidence and clarity. This can be done in consultation with all rights and stakeholders to make sure regulations are sufficient so that storage projects can move ahead expediently.

**Vesting of Pore Space**

As has been mentioned previously by multiple industry and stakeholders, the vesting of all pore space (under private and crown land) is necessary for all players to have an understanding of how geologic carbon storage will be implemented and how it will be monitored and regulated.

**Pipelines**

Movement of carbon dioxide (CO2) will need to be – in part or in whole – via pipeline. That being the case, there needs to be clear definitions on how pipelines will be permitted, constructed and governed.

**Other pieces that should be considered for a regulatory framework**

* How to support and promote economies of scale when it comes to storage
* Pricing for storage
* Public input into depth restrictions
* The OEB could add an additional level of bureaucracy that may not be needed and could delay projects. Greater discussion may be required.

The regulatory framework for commercial-scale geologic carbon storage projects is an important component to the development of a low-carbon economy and Ontario’s ability to achieve environmental and climate change goals. Ontario must take a stronger leadership role if businesses are to be able to access supports and incentives that still exist via the federal government and to not lose out on projects to other jurisdictions who have come out strong in favour of the emerging hydrogen economy.

We look forward to being a key stakeholder to assist the province in the development and implementation of all aspects of its hydrogen strategy/framework to make this vital need achievable and expeditiously for all.

Respectfully submitted by the Sarnia-Lambton Economic Partnership