CALL FOR TENURE PROPOSALS FOR CARBON SEQUESTRATION HUBS October 2025



1. Part A—INTRODUCTION AND OVERVIEW

1.1 Introduction

Carbon capture, utilization, and storage (CCUS) technologies are recognized as effective tools for reducing emissions and mitigating the effects of climate change. Carbon sequestration, specifically, the permanent disposal of carbon dioxide in dedicated geologic formations, presents a strategic opportunity for Alberta to achieve its economic and environmental objectives. It will play a key role for a variety of industries, including a clean hydrogen economy, petrochemical development, and enhancing environmental performance in the oil sands.

The Government of Alberta ("Province") held two rounds of requests for full project proposals (RFPP), which resulted in granting carbon sequestration evaluation agreements to numerous entities to pursue development of carbon sequestration hubs in various locations across Alberta.

The Province is opening a new call for tenure proposals to service emissions from the northwest Region of the Province, as described below. This region was selected due to demand and previously successful hub proponents in the region stepping away from their plans. A carbon sequestration hub will be an area of pore space ("Location") overseen by a private company that can effectively plan, enable, and undertake sequestration of captured carbon dioxide from various emissions sources. Having an industry steward of the Location, with the oversight of Alberta's regulatory system, will work toward efficient use of the pore space and support strong modelling, monitoring, and risk management practices. Current processes for enhanced oil recovery and small-scale and remote sequestration will remain in place.

Proponents will communicate their technical, financial, and operational capacity to manage a carbon sequestration hub, which is an important aspect of Alberta's energy system. Successful proponents will be expected to obtain all necessary regulatory approvals and ensure the safe and effective operation and closure of the hub, enabling access to pore space and sequestration of emissions from Alberta's industrial sector at fair rates. Proponents will also need to identify and address potential subsurface interactions and conflicts including potential third-party compensation.

1.2 Call for Tenure Proposals

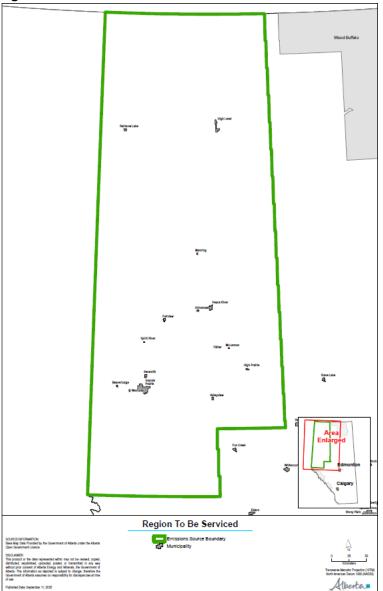
In this process, the Province is accepting proposals from companies interested in building, owning, and operating carbon sequestration hubs to enable the sequestration of emissions from the northwest region (see Figure 1).

Tenure proposals will be evaluated by the Province, and successful proponents will be offered a Carbon Sequestration Evaluation Agreement (CSEA) with the Province to undertake activities to evaluate the suitability of the area for permanent carbon sequestration. Upon completing the evaluation, CSEA holders may apply for a Carbon Sequestration Agreement (CSA). Applicants that apply for, and meet the department's requirements will be granted a CSA, which outlines the rights, responsibilities, and requirements of an agreement holder. The intent of a CSA is to:

- 1. grant the successful proponent the right to drill wells, conduct evaluation and testing, establish monitoring baselines, and inject captured carbon dioxide into deep subsurface formations within previously defined zones for sequestration, while also:
- 2. place requirements on the agreement holder that include:
 - managing the development of the hub and the efficient use of the pore space;

- ensure open access to affordable use of the hub where appropriate; and
- provide just and reasonable cost recovery to the Agreement holder.

Figure-1



For additional information on the Carbon Sequestration Agreement, please refer to <u>Carbon Sequestration</u>
Agreement Guide.

All required regulatory approvals are the responsibility of the proponent and will not be granted through this process. This process does not represent a guarantee or certification for the Location's suitability for sequestration.

To strengthen the integrity of a carbon management system for Alberta, the Province may select more than one proposal to service the region. This can be in response to a demonstrated current or future demand, it can provide contingency sequestration options, and it can further enable competitive service rates.

1.4 Eligibility and Exclusions

- The process is open to proposals that will service and enable the sequestration of carbon dioxide emissions from multiple (including third party) facilities and provide open access to the hub.
- Proposals should primarily target emissions from the region

highlighted in Figure 1.

- It is not a requirement to have participated in the 2021 or 2022 RFPPs.
- This process is only intended to provide access to subsurface formations (i.e., pore space) to evaluate the long-term potential for carbon sequestration.
- Projects that inject carbon dioxide as part of enhanced oil recovery (i.e., carbon dioxide EOR), or formation acid gas injection, will continue to operate under current mineral rights tenure systems

 such rights will not be granted through this process.
- The Province reserves the right to not consider proposals that do not meet the eligibility (e.g., location, depth, providing open access) or present challenges that may arise following standard review practices by the Province.

 Proponents must ensure the appropriate rights for the proposed location are available for disposition, including surface access and subsurface restrictions.

2. Part B —GUIDELINES FOR SUBMISSION OF TENURE PROPOSAL

Proposals are invited from companies or groups of companies, wishing to apply to be the successful developer and manager of a carbon sequestration hub.

The Province reserves the right to amend, suspend, postpone, or cancel the outlined process and deadlines, or this Call for Tenure Proposals at its sole discretion.

2.1 Guidelines for Submission of Tenure Proposal

A. Submitting the Tenure Proposal

- Medium: The department will only accept electronic submissions through the Electronic
 Transfer System (ETS). A step-by-step guide to submit an application via ETS can be referred to
 here: ETS Application Submission Guide. To set up an ETS account, refer to this link: ETS Account
 Setup
- **Length**: Proposals are encouraged to not exceed 50 pages. More details can be provided as appendices if required.
- **Format**: Information in a proposal must be organized in the format provided in Table 1 below to facilitate the efficient review of submissions.
 - Applications will be accepted from until January 6, 2026. Please submit one electronic submission in PDF format through ETS.
- **Queries**: In case of any queries regarding your submission, please contact the CCUS Implementation team at carboncapture.energy@gov.ab.ca.

B. Submission Criteria

The headings listed below are the criteria that proponents must include in their proposal.

- 1. Title of the Proposed Project.
- 2. Name, Address, and Affiliation of the Principal Applicant(s).
- 3. Contact Information: Project Leader and key team members.
- **4. Detailed Information Requirements outlined in Table 1 below** (Follow the organizational structure in Table 1 to facilitate the review of submissions).

Table 1 - Detailed Information Requirements				
	Criteria	Description		
1.0 – General Overview (Weighting 2.13%)				
1.1	Overview	A high-level overview of the project configuration and execution strategy: location, a brief justification of the requested hub area size, scope, schedule, cost estimate, proximity to carbon dioxide sources, project proponents, financing plan, etc.		
2.0 – Business Model (Weighting 25.53%)				
2.1	Economic Analysis	Outline proposed project life cycle economics. This may include information such as assumptions on capital cost, operating cost, reclamation costs, maintenance costs, cash flow, grants, and revenue generation including scenario analysis. Must include estimates for Capital Efficiency (estimated capital cost for the injection and storage facility divided by the annual injection capacity, in dollars per tonne) and Operating Efficiency (estimated operating cost for the injection and storage facility divided by the annual injection capacity, in dollars per tonne).		
2.2	Financing	Summarize proposed financing arrangements for the project. This may indicate the status of all such arrangements and the proponent's expectation regarding probability and amount of funding.		
2.3	Commercial Strategy	Outline commercial strategy and/or business plan. This may include the approach to setting reasonable service rates for clients, soliciting and accepting additional volumes of carbon dioxide. Also, include risk mitigation approaches for fluctuating carbon credit prices.		
2.4	Financial History	The Proponent's financial capability, past financial performances over the previous three (3) years. Also, an overview of all current ongoing business activities of entities comprising the proponent that may be relevant for the successful execution of its project.		
2.5	Socio-economic Benefits	Provide details of the project's ancillary benefits. This may include potential Crown revenue, socio-economic benefits such as employment, positive social impacts to the community surrounding your project's sites (including communities through which pipelines are built), or positive environmental outcomes in addition to the reduction of carbon dioxide in the regions associated with the proposed project.		
3.0	.0 Public Engagement and Benefits (Weighting 10.64%)			
3.1	Benefits to Indigenous Communities	Proponents should describe how the proposed project will benefit First Nations, Métis communities, and Indigenous Albertans (e.g., incorporate or enable participation of Indigenous communities within the context of skills training, employment, business development, community investment, private sector partnerships, and major project participation).		
	Notes:			
		oosal stage, there is no consultation trigger under the Government of Alberta's Indigenous- sultation Policies and Guidelines.		
3.2	Public	Provide a plan for and demonstrate the ability to ensure a robust, non-standard, ongoing		
	Engagement	public engagement. This should include information on how the proponent will safeguard public confidence in carbon capture and storage moving forward.		
4.0 - Project Configuration and Execution (Weighting 27.66%)				
4.1	Project Execution	Provide the most recent copy of a draft of the project execution plan with at a minimum of a Level 1 schedule. Also, please provide the tentative dates of further Levels. Provide the timeframe in which carbon dioxide injection would commence. If a phased approach is being put forward, outline the anticipated timeframes for development of each subsequent phase. Please include project in-service date.		

Notes:

- The Province will not be implementing a mandatory in-service, or start-up, date as part of this process. However, proposals will be reviewed and assessed for when they will be able to provide carbon sequestration services to the region. Greater weighting will be given to projects that can provide carbon sequestration services to the region in a shorter period of time. Note that proposals must ensure that appropriate time is included for the regulatory process (e.g., consultation, baseline monitoring, etc.)
- Carbon capture and transportation infrastructure will not be within the scope of the final carbon sequestration agreement. However, it is expected that the proponent will provide an understanding of how carbon dioxide transportation will be addressed.

Provide the most recent copy of the design basis memorandum (DBM), or similar document **Project Design** 4.2 **Details** that shows details for the initial design and system operation. Risks and 4.3 Identify at a high level, all key project and sequestration risks (including within the geosphere, Mitigations hydrosphere, atmosphere, and biosphere) and anticipated mitigation measures. Examples of geosphere risks include containment, capacity, injection pressure, injectivity, generation of induced seismicity, and impacts to other subsurface users and/resources within the zone of pressure influence. Although the Monitoring, Measurement and Verification (MMV) requirements and oversight are the responsibility of the AER, please also provide an overview of your MMV plan, Anticipated capacity targets based on the best available public data prior to conducting the evaluation. An initial assessment of the following: o Potential impacts to the activities and operations of other subsurface pore space users (including mineral recovery). Potential biosphere, geosphere, atmosphere and hydrosphere impacts Anticipated project capacity, containment, injectivity and injection pressure characteristics and potential for induced seismicity generation Expected requirements for monitoring plume containment and conformance o Legacy wells and other features of interest to containment Project plan, timeline, modeling and site characterization activities that will be conducted to evaluate each of the following elements of the project risk assessment: Risks to the activities and operations of other subsurface pore space users (including mineral and heat recovery) o Biosphere, geosphere, atmosphere and hydrosphere risks Capacity, containment, injectivity, injection pressure and induced seismicity generation risks Legacy well and subsurface feature assessment An assessment of MMV techniques and technology that will be considered to monitor and evaluate conformance, containment and induced seismicity. Notes: The department's review of the MMV is for understanding only, does not replace the regulatory approval process, and awarding a CSEA does not imply that the MMV is or will be approved. The AER holds all responsibility for reviewing and approving MMV plans **Project Design** Annual volumes (in million tonnes per annum, MTPA) that the project has been designed to 4.4 inject, the capacity of associated infrastructure connecting the injection location to the Capacity emitting facilities, and the total useful life of the project. In cases where a phased approach is proposed, outline the annual sequestration volume for each phase.

4.5 Project Secured Volumes

Annual volumes (for each phase, where applicable) the project has secured, either through an anchoring project or agreement/s with third-party emitters such as:

- a non-binding Letter of Intent (LOI);
- a Memorandum of Understanding (MOU); or
- a contract.

Notes:

- It is not a requirement to have prior agreements with emissions facilities (i.e., anchoring emissions), however, such agreements may be a consideration during proposal review and evaluation.
- If there are agreements in place between a proponent and an emissions facility and the proponent is not successful, it is expected that a successful proponent would undertake meaningful and reasonable negotiations to accommodate those emissions.

5.0 - Project Location (Weighting 17.02%)

5.1 Surface and Subsurface Areas

Outline the geographic extent of the project including the legal land description. Include current geological and reservoir engineering understanding of the proposed reservoir and cap rock, including the level of confidence in reservoir suitability, the rationale for the identified zones, and the technical justification for the proposed geographic extent of each area and geologic zone of interest. Describe each proposed reservoir as well as its associated geological cap rock and under-burden.

Altogether, this should be supported by data where available (e.g. cores, logs, pressure transient analyses, minifracs, and local/regional analogues). Describe how this data supports the project's annual expected injection volumes as described in section 5.2 Storage Efficiency.

Provide a map showing the extent of the requested area complete with a legal description and include all subsurface maps and currently available geological descriptions.

Notes:

- Please include one area of interest per submission. If multiple areas of interest are being considered, please submit one proposal for each.
- In cases, where there are overlapping proposals, the department will work to select the strongest proposal. However, appreciating the expertise of strong proponents, the intent is to structure sequestration agreements to enable industry partnerships should proponents seek to subsequently work together.

5.2 Annual Storage Efficiency (Project annual capacity in MT/ha/year)

Provide the project's expected annual injection volumes in mega tonnes (Mt) of carbon dioxide (for each phase, in cases where a phased approach is proposed) and the total area being requested in hectares.

5.3 Potential Subsurface Conflicts

Describe any integration or potential conflicts with surface and subsurface operations and known resources (existing and potential) in the identified surface and subsurface zone(s) of interest. Itemize these potential surface (sensitive areas, no access areas, etc.) and subsurface (e.g., existing and potential resource development, disposal/storage activities, mineral ownership, etc.) conflicts and provide mitigation options. Outline the subsurface zone of interest for operations and the proposed stratigraphic interval. Please include an annotated 'type' well log.

Notes:

The information provided in the proposal related to potential subsurface conflicts does represent a
regulatory approval process. Successful proponents must follow all regulatory requirements including AER
processes in consideration of potentially directly and adversely affected parties. Successful proponents are
expected to work to identify and address potential subsurface interactions and conflicts including
potential third-party compensation.

6.0 - Proponent's Operational Capacity (Weighting 12.77%)

6.0 -	Proponent's Oper	rational Capacity (Weighting 12.77%)		
6.1	Execution Experience	Discuss and demonstrate experience in developing, constructing, and operating projects that are similar in scope and scale to the sequestration hub being proposed. Provide a listing of previous or current projects. Demonstrate subsurface expertise and/or carbon sequestration experience, experience in infrastructure development, pipeline related experience, and experience with injection facilities and wells (e.g., AGD, waste and water disposal, CCUS, carbon dioxide-EOR, SAGD, and gas storage).		
6.2	Personnel and Organizational Structure	Provide the organizational structure of the hub proponent and functions of each department. If the proponent is a consortium or joint venture or partnership, outline the legal structure of the arrangement, indicate which corporate entities will comprise the proponent and outline the respective roles that all such entities will contribute, including consultants. Provide information on all the top management, technical staff, and external consultants that demonstrates experience and the breadth of roles on the project team required for the development and operation of the proposed carbon sequestration hub.		
6.3	Regulatory Experience	Provide a clear understanding of the regulatory process and approvals required by the successful proponent after an evaluation is granted, including the associated timelines, and any potential non-standard requirements unique to large scale carbon sequestration.		
7.0 -	7.0 - Emissions Policy (Weighting 4.25%)			

Outline a plan to manage the elements of the emissions policy environment (e.g., carbon pricing, offsets, or tax credits) that effect the economic viability considerations. Approach to generation and management of any carbon credits resulting from the project. Include the roles/responsibilities taken on by various project partners including who is likely to take the role of offset project developer.

Note:

• The Province will not be prescribing how any carbon credits will be managed by a sequestration hub under this process. However, it is expected that the proponent will demonstrate they have a strong understanding of current and emerging crediting schemes and a reasonable process to ensure appropriate flowback and meet quantification and verification requirements.

2.2 Communications with the Province

During the proposal process, comments or requests for information by proponents to the Province concerning this process, excluding usual government business meetings with proponents, can be made through the email address carboncapture.energy@gov.ab.ca.

2.3 Stakeholder Inquiries

Interested parties may address questions of clarification on this proposal to the Province by email to the following email address: carboncapture.energy@gov.ab.ca. The Province will endeavour to respond but shall not be obligated to reply to inquiries.

The proponent has the responsibility to notify the Province, in writing, of any ambiguity, divergence, error, omission, oversight, contradiction, or item subject to more than one interpretation in this proposal, as it is discovered, and to request any instruction, decision, or direction necessary to prepare their proposal.

Verbal responses to inquiries are not binding on any party.

2.4 Clarification of Submissions

Following the closing date, the Province may, but shall not be obligated to, contact or meet with any or all proponents for the purpose of seeking clarification relative to their submissions.

2.5 Conflict of Interest

On or before the Closing Date and Time of this Call for Tenure Proposals, proponents must fully disclose to the Province, in writing, the circumstances of any actual, possible or perceived conflict of interest in relation to the proponent, all team members or any employee, sub-contractor or agent, if the proponent were to become the successful proponent for the project. The Province shall review any submissions by proponents under this provision and may reject any proposal where, in the opinion of the Province, the proponent, any team member, employee, sub-contractor or agent is, could be, or could be perceived to be in a conflict of interest if the proponent were to become the successful proponent for this project.

2.6 Confidentiality

All applications, and communications related to the applications submitted in the proposals process are confidential and shall be maintained in confidence and kept secure by the Province. Information may be shared within departments of the Province, with Cabinet, and others supporting the process (e.g., consultants in the review process under confidentiality agreements).

2.7 Access to Information Act (ATIA)

Proponents acknowledge that:

- ATIA applies to all information and records relating to, or obtained, generated, created, collected or provided under, the proposal herein, or any other proposal, and which are in the custody or under the control of the Province. ATIA allows any person a right of access to records in the Province's custody or control, subject to limited and specific exceptions as set out in ATIA.
- A proponent, if it considers portions of its proposal to be confidential, shall identify those parts
 of its proposal to the Province considered to be confidential and what harm could reasonably be
 expected from disclosure. The Province does not warrant that this identification will preclude
 disclosure under ATIA.
- In the event of a request for access under ATIA, the Province will provide any affected proponent notice and an opportunity to object to the disclosure of information that may be confidential.
- The personal information collected through the application process of the "Carbon Sequestration Hub Call for Tenure Proposals" is for the purpose of evaluating suitability of the

applicant/business to become a Carbon Sequestration Hub. This collection is authorized by section 4(c) of the Protection of Privacy Act and section 8 of the Government Organization Act.

 For questions about the collection of personal information, please contact carboncapture.energy@gov.ab.ca

2.8 Claims for Damages or Compensation

Notwithstanding any other provision in this Call for Tenure Proposals, a proponent who responds to this Call for Tenure Proposals agrees that any claim for damages or compensation of any kind related directly or indirectly to a breach of contract or other cause of action arising from:

- the Call for Tenure Proposals process;
- the evaluation of proposals; or
- a decision by the Province not to proceed with the Call for Tenure Proposals process

shall be limited to a maximum of the proponent's actual Call for Proposals preparation costs. "Proposal preparation costs" are the actual costs borne by a proponent to prepare and submit its Proposal. For further clarity, no damages shall be payable where the Province declines to select a specific Proposal, or any Proposals, in the absence of willful misconduct.

2.9 Call for Tenure Proposal Acceptance/Rejection

The Province is not required to accept any Proposal and may reject any or all Proposals.