





TABLE OF CONTENTS

**PART 1 - GENERAL INFORMATION .....5**

1.1 INTRODUCTION ..... 5

1.2 SUMMARY ..... 5

1.3 DEBRIEFINGS ..... 5

**PART 2 - BIDDER INSTRUCTIONS.....6**

2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS ..... 6

2.2 SUBMISSION OF BIDS ..... 6

2.3 FORMER PUBLIC SERVANT ..... 7

2.4 ENQUIRIES - BID SOLICITATION ..... 8

2.5 APPLICABLE LAWS..... 8

2.6 IMPROVEMENT OF REQUIREMENT DURING SOLICITATION PERIOD ..... 8

2.7 BASIS FOR CANADA'S OWNERSHIP OF INTELLECTUAL PROPERTY ..... 8

2.8 BID CHALLENGE AND RECOURSE MECHANISMS ..... 9

**PART 3 - BID PREPARATION INSTRUCTIONS..... 10**

3.1 BID PREPARATION INSTRUCTIONS ..... 10

**PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION ..... 11**

4.1 EVALUATION PROCEDURES ..... 11

4.1.1 TECHNICAL EVALUATION..... 11

4.2 BASIS OF SELECTION ..... 11

4.2.1 HIGHEST COMBINED RATING OF TECHNICAL MERIT (70%) AND PRICE (30%)..... 11

**PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION ..... 13**

5.1 CERTIFICATIONS REQUIRED WITH THE BID..... 13

5.1.1 INTEGRITY PROVISIONS - DECLARATION OF CONVICTED OFFENCES ..... 13

5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION ..... 13

5.2.1 INTEGRITY PROVISIONS – REQUIRED DOCUMENTATION ..... 13

5.2.2 FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - BID CERTIFICATION ..... 14

5.2.3.2 EDUCATION AND EXPERIENCE ..... 14

**PART 6 – SECURITY, FINANCIAL AND OTHER REQUIREMENTS..... 15**

6.1 SECURITY REQUIREMENTS..... 15

**PART 7 - RESULTING CONTRACT CLAUSES ..... 16**

7.1 STATEMENT OF WORK ..... 16

7.2 STANDARD CLAUSES AND CONDITIONS..... 16

7.2.1 GENERAL CONDITIONS..... 16

7.2.2 SUPPLEMENTAL GENERAL CONDITIONS ..... 16

7.3 SECURITY REQUIREMENTS ..... 16

7.4 TERM OF CONTRACT ..... 16

7.4.1 PERIOD OF THE CONTRACT ..... 16

7.4.2 OPTION TO EXTEND THE CONTRACT ..... 16

7.4.3 COMPREHENSIVE LAND CLAIMS AGREEMENTS (CLCAs) ..... 16

7.5 AUTHORITIES ..... 17

7.5.1 CONTRACTING AUTHORITY ..... 17



7.5.2 PROJECT AUTHORITY..... 17

7.5.3 CONTRACTOR'S REPRESENTATIVE ..... 17

7.6 PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS..... 17

7.7 PAYMENT ..... 18

7.7.1 BASIS OF PAYMENT – LIMITATION OF EXPENDITURE ..... 18

7.7.1.1 LIMITATION OF EXPENDITURE..... 18

7.7.2 BASIS OF PAYMENT - FIRM PRICE ..... 18

7.2.3 METHOD OF PAYMENT ..... 18

7.8 INVOICING INSTRUCTIONS..... 19

7.9 CERTIFICATIONS AND ADDITIONAL INFORMATION ..... 19

7.9.1 COMPLIANCE ..... 19

7.10 APPLICABLE LAWS..... 19

7.11 PRIORITY OF DOCUMENTS..... 19

7.12 FOREIGN NATIONALS (CANADIAN CONTRACTOR *OR* FOREIGN CONTRACTOR) ..... 20

7.13 INSURANCE ..... 20

7.14 DISPUTE RESOLUTION ..... 20

**ANNEX A - STATEMENT OF WORK..... 21**

**ANNEX B - BASIS OF PAYMENT ..... 25**

**APPENDIX 1 - EVALUATION CRITERIA ..... 26**

1. TECHNICAL CRITERIA..... 26

1.2 EVALUATION OF RATED CRITERIA ..... 27

**APPENDIX 2 - FINANCIAL BID PRESENTATION SHEET ..... 31**

FIRM PRICE AND LIMITATION OF EXPENDITURE..... 31

FIRM PRICE AND LIMITATION OF EXPENDITURE – OPTION 1 ..... 32

FIRM PRICE AND LIMITATION OF EXPENDITURE - OPTION 2 ..... 33

FIRM PRICE AND LIMITATION OF EXPENDITURE – OPTION 3 ..... 34



The Articles contained in this document are mandatory in their entirety, unless otherwise indicated. Acceptance of these Articles, in their entirety, as they appear in this document, is a Mandatory requirement of this RFP.

**Suppliers submitting a proposal containing statements implying that their proposal is conditional on modification of these clauses or containing terms and conditions that purport to supersede these clauses or derogate from them will be considered non-responsive.**

Bidders with concerns regarding the provisions of the Bid Solicitation document (including the Resulting Contract Clauses) should raise such concerns in accordance with the Enquiries provision of this RFP.



## **PART 1 - GENERAL INFORMATION**

### **1.1 Introduction**

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Basis of Payment, the Security Requirements Checklist, and any other annexes.

### **1.2 Summary**

By means of the RFP, Natural Resources Canada (NRCan) is seeking proposals from bidders to provide CanmetENERGY-Ottawa (CE-O) designs to develop recommendations for the development of codes and standards for cap rock strength integrity of potential subsurface storage sites for hydrogen gas in Canada. The work will include the acquisition of core samples then preparing, testing, analyzing and reporting on the results in collaboration with CE-O.

The requirement is subject to the provisions of the: World Trade Organization Agreement on Government Procurement (WTO-AGP), the Canada-Chile Free Trade Agreement (CCFTA), the Canada-Peru Free Trade Agreement (CPFTA), the Canada-Colombia Free Trade Agreement (CColFTA), the Canada-Panama Free Trade Agreement (CPanFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the Canadian Free Trade Agreement (CFTA), the Canada-Ukraine Free Trade Agreement (CUFTA) and the Canada-Korea Free Trade Agreement (CKFTA).].

The resulting contract will not include deliveries of services within locations within: “Yukon, Northwest Territories, Nunavut, Quebec, or Labrador that are subject to Comprehensive Land Claims Agreements (CLCAs). Any requirements for deliveries of services within locations: Yukon, Northwest Territories, Nunavut, Quebec, or Labrador that are subject to CLCAs will have to be treated as a separate procurement not forming part of the bid solicitation.

### **1.3 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing will be done in writing, by email.



## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2022-03-29) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

- **In the complete text content (except Section 1 and 3) Delete:** "Public Works and Government Services Canada" and **Insert:** "Natural Resources Canada." **Delete:** "PWGSC" and **Insert:** "NRCan"
- **Section 2: Delete:** "Suppliers are required to" and **Insert:** "It is suggested that suppliers"
- **Subsection 1 of Section 8: Delete entirely**
- **Subsection 2 of Section 8: Delete entirely**
- **Under Subsection 2 of Section 20:** Not applicable

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 180 days

### 2.2 Submission of Bids

Bidders must submit all proposals electronically. Given the current constraints on NRCan's networks, the electronic mail system has a limit of 15MB. Bidders are asked to contact the Contracting Authority to confirm receipt of their bid. NRCan encourages bidders to submit all bids earlier than the closing time in order to ensure sufficient time to be received in NRCan's server.

It is the Bidders responsibility to ensure that proposals are sent to the following e-mail address, by the time and date indicated on page 1 of this RFP document.

- Send proposals to this email address: [bianca.moore@NRCan-RNCan.gc.ca](mailto:bianca.moore@NRCan-RNCan.gc.ca)
- Contact the Contracting Authority Bianca Moore at 343-543-4785 by either telephone call or email for receipt of bid confirmation.

### **IMPORTANT**

It is requested that you write the following information in "Subject" of the e-mail:

[NRCan-5000072051](#)

**Due to the nature of the bid solicitation, bids transmitted by mail or facsimile to NRCan will not be accepted.**

**NRCan will not assume responsibility for proposals directed to any other location.**



The onus is on the Bidder to ensure that the proposal is submitted correctly to the above address. Not complying with the above instructions may result in NRCan’s inability to ascertain reception date and/or to consider the bid prior to contract award. Therefore, NRCan reserves the right to reject any proposal not complying with these instructions.

**2.3 Former Public Servant**

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada’s request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a) an individual;
- b) an individual who has incorporated;
- c) a partnership made of former public servants; or
- d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c. C-17, the [Defence Services Pension Continuation Act](#), 1970, c. D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c. R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c. R-11, the [Members of Parliament Retiring Allowances Act](#), R.S. 1985, c. M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c. C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? Yes ( ) No ( )

If so, the Bidder must provide the following information, for all FPSs in receipt of a pension, as applicable:

- a) name of former public servant;
- b) date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder’s status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2019-01](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).  
Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? Yes ( ) No ( )

If so, the Bidder must provide the following information:

- a) name of former public servant;



- b) conditions of the lump sum payment incentive;
- c) date of termination of employment;
- d) amount of lump sum payment;
- e) rate of pay on which lump sum payment is based;
- f) period of lump sum payment including start date, end date and number of weeks;
- g) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

#### **2.4 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

#### **2.5 Applicable Laws**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

#### **2.6 Improvement of Requirement During Solicitation Period**

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least five (5) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

#### **2.7 Basis for Canada's Ownership of Intellectual Property**

Natural Resources Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following reasons: as set out in the [Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts](#)

1. Where the main purpose of the Crown Procurement Contract, or the deliverables contracted for, is:
  - o To generate knowledge and information for public dissemination.





## 2.8 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
- Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1 Bid Preparation Instructions**

Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (1 electronic copy)

Section II: Financial Bid (1 electronic copy) [in a separate file and document](#)

Section III: Certifications (1 electronic copy)

Section IV: Additional Information (1 electronic copy)

**Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.**

#### **Section I: Technical Bid**

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

#### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Pricing Schedule in Basis of Payment in Annex B.

##### **3.1.2 Exchange Rate Fluctuation**

[C3011T](#) (2013-11-06) Exchange Rate Fluctuation

#### **Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.



**PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

**4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

**4.1.1 Technical Evaluation**

Mandatory and point rated technical evaluation criteria are included in Appendix 1 – Evaluation Criteria.

**4.2 Basis of Selection**

**4.2.1 Highest Combined Rating of Technical Merit (70%) and Price (30%)**

1. To be declared responsive, a bid must:
  - a. Comply with all the requirements of the bid solicitation; and
  - b. meet all mandatory criteria; and
  - a. obtain the required minimum of 45 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 75 points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70 % for the technical merit and 30 % for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70 %.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30 %.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 70/30 ratio of technical merit and price, respectively. The total available points equal 135 and the lowest evaluated price is \$45,000 (45).

<b>Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)</b>			
	<b>Bidder 1</b>	<b>Bidder 2</b>	<b>Bidder 3</b>
<b>Overall Technical Score</b>	115/135	89/135	92/135
<b>Bid Evaluated Price</b>	\$55,000.00	\$50,000.00	\$45,000.00



<b>Calculations</b>	<b>Technical Merit Score</b>	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	<b>Pricing Score</b>	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27$	$45/45 \times 30 = 30$
<b>Combined Rating</b>		84.18	73.15	77.70
<b>Overall Rating</b>		1st	3rd	2nd



**PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder’s certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

**5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

**5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the Integrity declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

**5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

**5.2.1 Integrity Provisions – Required Documentation**

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

- Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder or, in the case of a private company, the owners of the company.
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).
- Bidders bidding as partnerships do not need to provide lists of names.

Name of Bidder: \_\_\_\_\_

OR

Name of each member of the joint venture:



Member 1: \_\_\_\_\_  
 Member 2: \_\_\_\_\_  
 Member 3: \_\_\_\_\_  
 Member 4: \_\_\_\_\_

Identification of the administrators/owners:

SURNAME	NAME	TITLE

**5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid list at the time of contract award.

**5.2.3.2 Education and Experience**

SACC Manual clause [A3010T](#) (2010-08-16) Education and Experience.



## **PART 6 – SECURITY, FINANCIAL AND OTHER REQUIREMENTS**

### **6.1 Security Requirements**

There are no security requirements associated with this procurement.



## **PART 7 - RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### **7.1 Statement of Work**

The Contractor must perform the Work in accordance with the Statement of Work at Annex A and the Contractor's technical bid entitled \_\_\_\_\_, dated \_\_\_\_\_. (*to be completed at contract award*)

### **7.2 Standard Clauses and Conditions**

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### **7.2.1 General Conditions**

[2035](#) (2022-12-01), General Conditions - Higher Complexity - Services, apply to and form part of the Contract. (replace references to Public Works and Government Services Canada (PWGSC) with Natural Resources Canada (NRCan))

#### **7.2.2 Supplemental General Conditions**

The following clauses apply to and form part of this contract:

[4007](#) (2022-12-01), Canada to Own Intellectual Property Rights in Foreground Information

### **7.3 Security Requirements**

There is no security requirement applicable to the Contract.

### **7.4 Term of Contract**

#### **7.4.1 Period of the Contract**

The period of the Contract is from date of Contract to March 31, 2024 Inclusive.

#### **7.4.2 Option to Extend the Contract**

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to three (3) additional one (1) year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least five (5) calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

#### **7.4.3 Comprehensive Land Claims Agreements (CLCAs)**

The Contract is not subject to any Comprehensive Land Claims Agreements.





## 7.5 Authorities

### 7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Bianca Moore

Title: Procurement Specialist

Organization: Natural Resources Canada (NRCan)

Address: 580 Booth Street, Ottawa, ON K1A 0E4

Telephone: 343-543-4785

E-mail address: [bianca.moore@nrca-rncan.gc.ca](mailto:bianca.moore@nrca-rncan.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### 7.5.2 Project Authority (to be provided at contract award)

The Project Authority for the Contract is:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_-\_\_\_\_-\_\_\_\_\_

E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority; however, the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 7.5.3 Contractor's Representative (to be provided at contract award)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_-\_\_\_\_-\_\_\_\_\_

E-mail address: \_\_\_\_\_

## 7.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act \(PSSA\) pension](#), the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance [with Contracting Policy Notice: 2019-01](#) of the Treasury Board Secretariat of Canada.



## 7.7 Payment

### 7.7.1 Basis of Payment – Limitation of Expenditure

For the work in section 4.1 referencing the “collection of samples” from Statement of Work Annex A:

The Contractor will be paid for its costs reasonably and properly incurred in the performance of the Work, in accordance with the Basis of Payment in Annex B, to a limitation of expenditure of \$\_\_\_\_\_ (*insert the amount at contract award*). Customs duties are included and Applicable Taxes are extra.

#### 7.7.1.1 Limitation of Expenditure

1. Canada's total liability to the Contractor under the Contract must not exceed \$\_\_\_\_\_ (*insert the amount at contract award*). Customs duties are included, and Applicable Taxes are extra.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
  - a. when it is 75 percent committed, or
  - b. four (4) months before the contract expiry date, or
  - c. as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work, whichever comes first.
3. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

### 7.7.2 Basis of Payment - Firm Price

For the work in section 4.1 referencing “basis analysis” and “reporting on year end activities” from the Statement of work at Annex A:

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex B for a cost of \$\_\_\_\_\_ (*insert the amount at contract award*). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 7.2.3 Method of Payment

#### Multiple Payments

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:



- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

## 7.8 Invoicing Instructions

Invoices shall be submitted using **the following method:**

E-mail:

[Invoicing-Facturation@nrcan-rncan.gc.ca](mailto:Invoicing-Facturation@nrcan-rncan.gc.ca)

**Note:** Attach "PDF" file. No other formats will be accepted

Please do not submit invoices using more than one method as this will not expedite payment.

Invoices and all documents relating to a contract must be submitted on the Contractor's own form and shall bear the Contract number: **(to be inserted at contract award)**

**Invoicing Instructions to suppliers:** <http://www.nrcan.gc.ca/procurement/3485>

## 7.9 Certifications and Additional Information

### 7.9.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### 7.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

### 7.11 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the supplemental general conditions [4007](#) (2022-12-01) – Canada to Own Intellectual Property Rights in Foreground Information;
- (c) the general conditions [2035](#) (2022-12-01), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment;



- (f) the Contractor's bid dated \_\_\_\_\_, (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award:*"), as clarified on \_\_\_\_\_ " *or* ", as amended on \_\_\_\_\_ " *and insert date(s) of clarification(s) or amendment(s)*).

**7.12 Foreign Nationals (Canadian Contractor *OR* Foreign Contractor)**

SACC Manual clause [A2000C](#) (2006-06-16) Foreign Nationals (Canadian Contractor)

*OR*

SACC Manual clause [A2001C](#) (2006-06-16) Foreign Nationals (Foreign Contractor)

**7.13 Insurance**

SACC Manual clause [G1005C](#) (2016-01-28) Insurance - No Specific Requirement

**7.14 Dispute Resolution**

The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.

- (a) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (b) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (c) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".

## ANNEX A - STATEMENT OF WORK

### 1.0 TITLE

Codes and Standards Development for Caprock Integrity in Underground Hydrogen Storage

### 2.0 BACKGROUND

The Government of Canada has committed to a net-zero economy by 2050. To achieve this goal, Canada must reduce GHG emissions from all industrial sectors by ~730Mt (ECCC, 2019). Currently, Canada is still heavily reliant on fossil fuels for most of our economic needs and must replace them with clean, decarbonized fossil fuel-based sources. Hydrogen gas could be used as a clean, low-carbon energy source. However, the quantities needed to switch from fossil fuels to hydrogen is enormous and would require new infrastructure, and storage capability. Surface storage technology is available but the scale of the storage need would be impractical to deploy to meet the energy needs of Canada's key industrial sectors. Additionally, hydrogen production projections in Canada are for more than 500 Mt of low-carbon hydrogen in 2050, and geological hydrogen storage will be critical to buffer changes in supply and demand.

Underground Hydrogen Storage (UHS) storage has been proposed as an alternative technique to store this fuel source to meet economic demand as buffer storage capacity. For UHS, storage of H<sub>2</sub> would need to take place in geologic media such as salt caverns, oil and gas reservoirs that are depleted, and possibly other reservoirs such as carbonates. However, very little is known about the physical and chemical behaviour of H<sub>2</sub> in the subsurface. Key issues that need to be determined are the identification of suitable types of reservoirs for storage which may include i.e. evaporites (salt caverns), oil and gas, carbonates; caprock and wellbore leakage potential; transport mechanisms in the reservoir; and chemical reactivity. Early research suggests that salt caverns are currently the best option for H<sub>2</sub> geologic storage because salt formations are understood to be relatively inert (will not react with H<sub>2</sub>) and will likely not permeate the salt caprock. In the longer term, much more storage capacity will be needed and other potential storage reservoirs such as depleted oil and gas reservoirs will be required.

There is considerable knowledge on hydrocarbon and CO<sub>2</sub> storage in geologic media, mostly from the expertise developed by the Oil and Gas industry. For decades, natural gas has been injected in to geologic reservoirs in Ontario and across the prairies to British Columbia as a buffer to meet peak demands. Large-scale injection (1Mt+/yr) of CO<sub>2</sub> in Saskatchewan (Weyburn-Midale) and Alberta (Shell Quest) has also proven successful for many years. With the experience developed in Canada and elsewhere, sufficient knowledge has been gained to develop operating standards for these industries. The Canadian Standards Association (now known as CSA), has led the development of standards: *Z341 (Storage of hydrocarbons in underground formations)*, *Z625 (Well Design)*, and *Z741 (Geological storage of carbon dioxide)*. Though there is significant industry knowledge and standards for geologic storage of hydrocarbons and CO<sub>2</sub>, no such standards exist for the storage of hydrogen, either in Canada or internationally.

The CSA held a workshop in 2021 to identify the gaps in knowledge that need to be addressed to enable the development of an industry standard for UHS. The key gaps identified were grouped into topics: i) Underground storage in salt caverns e.g. identify suitable reservoirs; ii) Mechanical Integrity Testing e.g. caprock, wellbore integrity; iii) Environmental Protection e.g. leakage, impacts, monitoring; iv) Safety considerations for underground storage of H<sub>2</sub> in geologic formations e.g. mitigation of leaks.

Some elements of existing applicable standards, cited above, may be transferable to produce a dedicated standard for UHS, however, some elements within these standards have technical deficiencies. The goal of the proposed project is to develop codes and standards for the strength of cap rocks for underground hydrogen storage facilities.

### 3.0 OBJECTIVES

CanmetENERGY-Ottawa (CE-O) is seeking proposals for a four-year contract designed to develop recommendations for the development of codes and standards for cap rock strength integrity of potential subsurface storage sites for hydrogen gas in Canada. The work will include the acquisition of core samples then preparing, testing, analyzing and reporting on the results



in collaboration with CE-O. Sample testing will be between 10 and 20 samples per year for four years and reporting will include three annual reports and a final report.

#### 4.0 PROJECT REQUIREMENTS

##### 4.1 Tasks, Deliverables, Milestones and Schedule Sample Acquisition and Workflow

The contractor will be responsible for acquiring up to 8 cap rock samples per year from potential subsurface hydrogen storage sites. Collection and analysis of whole core samples are preferred. Samples will be acquired and then tested for baseline properties. Duplicate samples will be soaked in hydrogen gas for an extended period of time and then analyzed again to determine the impact of hydrogen gas exposure on cap rock materials.

##### Sample Analysis

Samples must be prepared in accordance with ASTM Standard D4543 (Standard Practices for Preparing Rock Core as Cylindrical Specimens and Verifying Conformance to Dimensional and Shape Tolerances).

Rock testing will include core samples and full-diameter core depending on core availability. Rock core strength testing will include the following tests:

Uniaxial Compression Strength (UCS) Test, Triaxial Compression Tests, Brazilian Tensile Strength Tests.

Uniaxial compression testing of rock cores in accordance with ASTM Standard D7012 (Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures – Method C). Application of strain gauges, generally in accordance with ASTM Standard E1237 (Standard Guide for Installing Bonded Resistance Strain Gauges).

Triaxial compression testing in accordance with ASTM Standard D7012 (Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures – Method A). Core sample strains will be measured with extensometers, strain gauges will not be used. Vertical ‘Linear Variable Differential Transformers’ (LVDTs) are to be used for measurement.

Triaxial and Uniaxial Tests; Ideally 4 LVDT’s to be used

3 internal LVDT’s (2 vertical and one circumferential)

1 external LVDT

Brazilian Indirect Tensile Tests; uses one external LVDT.

Splitting Tensile Strength (Brazilian) tests on samples in accordance with ASTM Standard D 39670-05 (Standard Test Method for Splitting Tensile Strength of Intact Core Specimens). The core specimens that are tested shall have a ratio of thickness/diameter =  $0.2 < t/D < 0.75$ .

Determination of S- and P-wave velocities and determination of ultrasonic elastic constants, generally in accordance with ASTM Standard D2845 (Standard Test Method for Laboratory Determination of Pulse Velocities and Ultrasonic Elastic Constants of Rock).

Acquisition of stress-strain data throughout the sample loading in accordance with ASTM Standard D7012 (Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures – Method D ).

Monitoring and recording of incremental and cumulative acoustic emissions throughout each test. No ASTM Standard exists for this work, which shall be conducted using best practice based on precedent experience of the testing personnel in conducting similar work. Two arrays comprising three AE heads each will be positioned above and below the mid girth of the specimen.

All data accumulated during testing will be provided in electronic format. In addition, calculations to be undertaken and reported in appropriate plots, figures and/or tables will include axial stress, axial strain, circumferential strain, volumetric strain, crack volumetric strain, peak stress, crack initiation stress, crack damage stress, tangent Young’s Modulus (E40), Poisson’s Ratio, and ultrasonic wave velocities and elastic constants.



Photographs of specimens prior to and after testing (where possible) are to be included. The report should tabulate clearly the specimen identification number, length, diameter, density, P-wave & S-wave velocities, uniaxial compressive strength, crack initiation stress, crack damage stress, elastic constants (static & dynamic), and failure mode.

Every reasonable effort must be made to minimize moisture changes or other disturbance during specimen preparation in the laboratory, and the laboratory will provide a written description of the steps taken to fulfill this requirement.

Other analyses may be included in the project, provided the reason and rationale for the addition is accepted.

**Reporting**

Analyze the strength results to determine a Maximum Operating Pressure and determine a safety factor above the MOP. Data from the uniaxial and triaxial compression testing will be used to develop a Hoek-Brown failure envelope for the rocks.

Prepare annual reports describing the samples, testing procedures, results, assessing the quality of the results, determining the MOP and safety factor and provide recommendations on project direction. One project final report will include defensible code/standard recommendations for cap rock strength for potential subsurface hydrogen storage sites. All reports will be prepared in draft form and submitted to CE-O for comments, prior to acceptance.

Tasks/Activities	Deliverables/Milestones	Estimated Time Schedule
2023 Sample Acquisition	Acquire samples	Contract award to March 2024
2023 Sample Analysis	Baseline Analysis	Winter 2024
2023 Reporting	Report on year's activities.	Winter 2024
2024 Sample Acquisition	Acquire samples	Spring 2024 to Fall 2024
2024 Sample Analysis	Baseline Analysis	Summer 2024 to Winter 2025
2024 Reporting	Report on year's activities.	Winter 2025
2025 Sample Acquisition	Acquire samples	Spring 2025 to Fall 2025
2025 Sample Analysis	Baseline Analysis	Summer 2025 to Winter 2026
2025 Reporting	Report on year's activities.	Winter 2026
2026 Sample Acquisition	Acquire samples	Spring 2026 to Fall 2026
2026 Sample Analysis	Baseline Analysis	Summer 2026 to Winter 2027
2027 Reporting	Report on year's activities.	Winter 2027
2027 Final Report	Report recommending codes and standards	Winter 2027

**\*\* All dates in the above table are estimates. Contractor and Technical Authority can discuss and adjust timelines after contract award.**

**4.2 Reporting Requirements**

Monthly meetings between the contractor and the Project Authority will be conducted to discuss progress, budget, challenges and risks to the overall project. Discussions regarding the creation and production of annual and final reports will also occur during these meetings.



### **4.3 Method and Source of Acceptance**

Provide a description of the performance, quality, format and testing requirements which will be used to measure whether the work is acceptable or not. For example, you might use the following:

All deliverables and services rendered under any contract are subject to inspection by the Project Authority. The Project Authority shall have the right to reject any deliverables that are not considered satisfactory, or require their correction before payment will be authorized.

#### **NRCan's Scientific Integrity Policy:**

In satisfying the requirements of this agreement, the Recipient is encouraged to comply with the provisions and intent of the NRCan Scientific Integrity Policy (SIP) and to discharge its contractual obligations in support of research, science, or related activities in a manner consistent with all relevant NRCan SIP provisions. For more information on the Scientific Integrity Policy, please visit the NRCan website at: <https://www.nrcan.gc.ca/scientific-integrity/21665#a20>





**ANNEX B - BASIS OF PAYMENT**

(To be inserted at contract award)



**APPENDIX 1 - EVALUATION CRITERIA**

Bidders are advised that only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the criteria will not be considered demonstrated for the purpose of this evaluation.

The Bidder should provide complete details as to where, when (month and year) and how (through which activities/ responsibilities) the stated qualifications/experience were obtained. Experience gained during formal education shall not be considered work experience. All criteria for work experience shall be obtained in a legitimate work environment as opposed to an educational setting. Co-op terms are considered work experience provided they are related to the required services.

Bidders are also advised that the month(s) of experience listed for a project whose time frame overlaps that of another referenced project will only be counted once. For example: project one time frame is July 2001 to December 2001; project two time frame is October 2001 to January 2002; the total months of experience for these two project references is seven (7) months.

**1. Technical Criteria**

**1.1 Mandatory Evaluation Criteria**

The Mandatory Criteria listed below will be evaluated on a simple pass/fail basis. Proposals which fail to meet the mandatory criteria will be deemed non-responsive.

Criterion ID	Mandatory Criteria	Pass/Fail	Comments/Observations Please provide comments on reasons why a company failed, if applicable. Use additional sheets if necessary.
<b>M1</b>	The Project Manager <b>MUST</b> provide three (3) different and verifiable references from completed projects. <ul style="list-style-type: none"> <li>• The minimum documentation required for each reference includes:                             <ul style="list-style-type: none"> <li>○ Company name of client</li> <li>○ Name and phone number of client contact</li> <li>○ Brief (suggested around 300 words) description of work undertaken including an overview of the methodology used.</li> <li>○ Timing and duration of project.</li> </ul> </li> </ul>		
<b>M2</b>	One of the project personnel <b>MUST</b> have experience developing codes and standards for subsurface energy or CO <sub>2</sub> storage or sits on a codes and standards committee for subsurface energy or CO <sub>2</sub> storage. This experience must be shown in a submitted resume.		
<b>M3</b>	The proposed Project Manager <b>MUST</b> have a minimum of eight (8) years experience		



Criterion ID	Mandatory Criteria	Pass/Fail	Comments/Observations Please provide comments on reasons why a company failed, if applicable. Use additional sheets if necessary.
	conducting geomechanical analyses on caprocks. This experience must be shown in a submitted resume.		
<b>M4</b>	The Bidder <b>MUST</b> indicate they will conduct geomechanical analyses on whole core samples, not core plugs.		

### 1.2 Evaluation of rated criteria

The criteria contained herein will be used by NRCAN to evaluate each proposal that has met all of the mandatory criteria.

Proposals must achieve the stated minimum points required overall for the rated criteria to be assessed as responsive under the point rated technical criteria section; proposals not meeting the minimum required points will be deemed non-responsive.

Proposals will be evaluated based on the following criteria:

Criterion ID	Point Rated Technical Criteria	Points Breakdown	Max Points	Bidder's Score	Evaluators are to clearly detail how/why a Bidder did not receive full marks. Additional Sheets may be used.
<b>R1</b>	<p>The Bidder should provide a project and task schedule that assigns resources and timelines to meet the requirements as per the Statement of Work.</p> <p>Points are assigned against the following:</p> <ul style="list-style-type: none"> <li>a) The degree to which the schedule has included the steps indicated in the Statement of Work (<b>max 5 points</b>).</li> <li>b) The degree to which the Bidder has planned communication, identified risks and effectively assigned resources to complete each identified task (<b>max 3 points</b>).</li> <li>c) The degree to which the Bidder will share results, models, spreadsheets with NRCAN (<b>max 2 points</b>).</li> </ul> <p><b>10 points maximum.</b></p>	<ul style="list-style-type: none"> <li>a) 5 points for all 13 steps in the SOW. 4 points for 10-12 step in the SOW, 2 points for 7-9 steps in the SOW and 0 points for less than 7 steps.</li> <li>b) 1 point for a clear communication approach. 1 point for identification of project risks. 1 point for clear plan to assign resources to complete the project on time.</li> <li>c) 2 points for indicating all data (raw, refined,</li> </ul>	<b>10</b>		



		photos, calculations, spreadsheets etc.) will be shared. 0 points if bidder will not share all data, interpretations etc.			
<b>R2</b>	The Bidder should provide a detailed approach to acquiring core samples from each province. This includes relationships with operators to acquire the cores for applicable provinces. <b>10 points maximum.</b>	2 points for AB, 2 points for ON, 2 points for each additional province (max 3 additional provinces).	<b>10</b>		
<b>R3</b>	The Bidder should provide a detailed approach for conducting each laboratory analysis (uniaxial, triaxial, Brazilian, and permeability). Points are assigned against the following: <b>1 point</b> assigned for each method described ( <b>max 4 points</b> ) <b>1 point</b> assigned for each ASTM identified ( <b>max 4 points</b> ) <b>2 points</b> assigned for indicating Linear Variable Differential Transformers' (LVDTs) are to be used for measurement, NOT extensionmeters <b>5 points</b> for stating the Bidder can complete the permeability testing using hydrogen gas and detailing the methodology. <b>5 points</b> for overall workflow for conducting the analyses. <b>20 points maximum.</b>	0 pts = the bidder does not address. 1 pts = The bidder has provided information on the existence of the activity but does not provide sufficient detail or supporting documents. 3 pts =The bidder has fully described the activity and provided supporting documents as evidence.  <b>Total of 3 points</b>	<b>20</b>		
<b>R4</b>	The Bidder shall demonstrate their proposed approach for interpreting testing results and delivering recommendations for the creation of a code or standard for the deterioration of caprock strength in an underground hydrogen storage site.  Points assigned against the following: a) The description of the data analysis approach and interpretation. ( <b>max 10 points</b> ) b) The description of the approach for using the interpreted results to create a code or standard ( <b>max 12 points</b> ).	a) 2 points for including data uncertainty analysis and removal of spurious data. 2 points for discussing impact of hydrogen soaking times. 2 points for discussing permeability interpretation method. 2 points	<b>32</b>		



	<p>c) A member of the Bidder team sits on a codes and standards committee for subsurface energy storage or subsurface CO2 storage for ISO, CSA or a similar body. <b>(max 10 points).</b></p> <p><b>32 points maximum.</b></p>	<p>for discussing geomechanical interpretation method. 2 points for strength failure criterion method.</p> <p>b) 4 points for indicating bidder will consider/follow approach used for subsurface hydrocarbon storage. 4 points for indicating bidder will consider/follow approach used for CO2 storage. 4 points for identifying what the code or standard should include.</p> <p>c) Yes <b>10</b></p> <p>No <b>0</b></p>			
	<p><b>Diversity and Inclusion</b></p> <p>The Bidders should demonstrate the following corporate activities they have implemented to promote anti-racism and diversity within their organisation:</p> <p>a. The bidder has internally published policies or commitments on anti-racism and inclusiveness</p> <p>b. The bidder has publicly available organisational commitments to a diverse workforce</p> <p>c. The bidder’s employees are mandated to take mandatory training on anti-racism</p> <p>d. The bidder’s employees are mandated to take unconscious bias training</p> <p>e. The bidder has developed internal staffing and/or recruitment strategy(ies) to increase representation of underrepresented groups in their workforce.</p> <p>The bidder should provide details of the following activities.</p> <p>For activities described in a. and b. (Policy and commitments), the bidder should</p>		<b>3</b>		



	<p>provide copies of policy or commitment documents including their effective date. For activities described in c. and d. (training), the bidder should provide the name of the course and the service provider; if developed internally, a copy of the course outline.</p> <p>For activities described in e. (staffing), the bidder should provide copies of job posting, or other staffing/recruitment documents demonstrating compliance with the rated criteria.</p>				
<b>Total Points Available</b>			<b>75</b>		
<b>Minimum Score Required</b>			<b>45</b>		
<b>Bidder's Score</b>					



**APPENDIX 2 - FINANCIAL BID PRESENTATION SHEET**

**Firm Price AND Limitation of Expenditure**

**1. Firm Price**

For the work in section 4.1 referencing “basis analysis” and “reporting on year end activities” from the Statement of work at Annex A:

Bidder tendered all-inclusive firm price to perform the work is Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Description	Firm Price (Applicable Taxes Excluded)
Baseline Analysis	\$ _____
Reporting on Year’s End Activities	\$ _____
A - Total Firm Price (Taxes Extra):	\$ _____

**2. Limitation of Expenditure – Supplementary costs (on demand)**

For the work in section 4.1 referencing the “collection of samples” from Statement of Work Annex A:

The unit cost offered by the bidder for the additional work should be all-inclusive (in Canadian funds) prices. Applicable taxes are excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

A	B	C	D (BxC)
Description	Unit Cost	Estimated Quantity	Total Costs (Applicable Taxes Excluded)
Sample Analysis	\$ _____	8	\$ _____
B - Total Supplementary Costs:			\$ _____

\* THE LEVEL OF EFFORT (QUANTITY) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

\*\* FOR ANY ERRORS IN THE CALCULATION, THE RATE SCHEDULE WILL BE UPHELD.

**3. Bid Price**

Year 1 – Initial Contract Period (1 April 2023 to 31 March 2024)	
A - Total Firm Price	\$ _____
B - Total Supplementary Costs	\$ _____



A + B = Total Tendered Price for Financial Proposal Evaluation (Taxes Extra):	\$ _____
--	----------

**Firm Price AND Limitation of Expenditure – Option 1**

**1. Firm Price** (*specify the section of the Statement of Work concerned, as in section 9*)

For the work in section 4.1 referencing “basis analysis” and “reporting on year end activities” from the Statement of work at Annex A:

Bidder tendered all-inclusive firm price to perform the work is Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Description	Firm Price (Applicable Taxes Excluded)
Baseline Analysis	\$ _____
Reporting on Year’s End Activities	\$ _____
A - Total Firm Price (Taxes Extra):	\$ _____

**2. Limitation of Expenditure – Supplementary costs (on demand)**

For the work in section 4.1 referencing the “collection of samples” from Statement of Work Annex A:

The unit cost offered by the bidder for the additional work should be all-inclusive (in Canadian funds) prices. Applicable taxes are excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

A	B	C	D (BxC)
Description	Unit Cost	Estimated Quantity	Total Costs (Applicable Taxes Excluded)
Sample Analysis	\$ _____	8	\$ _____
B - Total Supplementary Costs:			\$ _____

\* THE LEVEL OF EFFORT (QUANTITY) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

\*\* FOR ANY ERRORS IN THE CALCULATION, THE RATE SCHEDULE WILL BE UPHELD.

**3. Bid**

Year 2 – Option 1 (1 April 2024 to 31 March 2025)	
A - Total Firm Price	\$ _____





B - Total Supplementary Costs	\$ _____
A + B = Total Tendered Price for Financial Proposal Evaluation (Taxes Extra):	\$ _____

**Firm Price AND Limitation of Expenditure - Option 2**

**1. Firm Price** (*specify the section of the Statement of Work concerned, as in section 9*)

For the work in section 4.1 referencing “basis analysis” and “reporting on year end activities” from the Statement of work at Annex A:

Bidder tendered all-inclusive firm price to perform the work is Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Description	Firm Price (Applicable Taxes Excluded)
Baseline Analysis	\$ _____
Reporting on Year’s End Activities	\$ _____
A - Total Firm Price (Taxes Extra):	\$ _____

**2. Limitation of Expenditure – Supplementary costs (on demand)**

For the work in section 4.1 referencing the “collection of samples” from Statement of Work Annex A:

The unit cost offered by the bidder for the additional work should be all-inclusive (in Canadian funds) prices. Applicable taxes are excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

A	B	C	D (BxC)
Description	Unit Cost	Estimated Quantity	Total Costs (Applicable Taxes Excluded)
Sample Analysis	\$ _____	8	\$ _____
B - Total Supplementary Costs:			\$ _____

\* THE LEVEL OF EFFORT (QUANTITY) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

\*\* FOR ANY ERRORS IN THE CALCULATION, THE RATE SCHEDULE WILL BE UPHELD.

**3. Bid**

<b>Year 3 – Option 2 (1 April 2025 to 31 March 2026)</b>
--



A - Total Firm Price	\$ _____
B - Total Supplementary Costs	\$ _____
A + B = Total Tendered Price for Financial Proposal Evaluation (Taxes Extra):	\$ _____

**Firm Price AND Limitation of Expenditure – Option 3**

**1. Firm Price** (*specify the section of the Statement of Work concerned, as in section 9*)

For the work in section 4.1 referencing “basis analysis” and “reporting on year end activities” from the Statement of work at Annex A:

Bidder tendered all-inclusive firm price to perform the work is Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Description	Firm Price (Applicable Taxes Excluded)
Baseline Analysis	\$ _____
Reporting on Year’s End Activities	\$ _____
A - Total Firm Price (Taxes Extra):	\$ _____

**2. Limitation of Expenditure – Supplementary costs (on demand)**

For the work in section 4.1 referencing the “collection of samples” from Statement of Work Annex A:

The unit cost offered by the bidder for the additional work should be all-inclusive (in Canadian funds) prices. Applicable taxes are excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

A	B	C	D (BxC)
Description	Unit Cost	Estimated Quantity	Total Costs (Applicable Taxes Excluded)
Sample Analysis	\$ _____	8	\$ _____
B - Total Supplementary Costs:			\$ _____

\* THE LEVEL OF EFFORT (QUANTITY) PRESENTED HEREIN IS USED FOR EVALUATION PURPOSES ONLY AND IT IS NOT A COMMITMENT BY CANADA.

\*\* FOR ANY ERRORS IN THE CALCULATION, THE RATE SCHEDULE WILL BE UPHELD.



<b>Year 4 – Option 3 (1 April 2026 to 31 March 2027)</b>	
A - Total Firm Price	\$ _____
B - Total Supplementary Costs	\$ _____
A + B = Total Tendered Price for Financial Proposal Evaluation (Taxes Extra):	\$ _____