



CCUS RD&D CALL

STORAGE & TRANSPORTATION FOCUS AREA

FULL PROJECT PROPOSAL FORM

Notes:

* Indicates mandatory field

Important Consideration: Be aware that the questions and weights of each section of the Full Project Proposal are different than those outlined in the <u>Applicant's Guide</u>. However, some key information regarding eligible applicants, eligible projects and activities, funding limitations, and timelines remain the same as in the Applicant's Guide. In cases where any inconsistencies between this, the Full Project Proposal form, and the Applicant's Guide arise, the Full Project Proposal form should be used as the final version.

The Access to Information Act (the "Act") governs the protection and disclosure of information, confidential or otherwise, supplied to a federal government institution. This Act is a law of public order; as such the Government of Canada, including NRCan, cannot contract out of it. Paragraph 20 (1) (b) of the Act states that: a government institution [such as NRCan] shall refuse to disclose any record requested under the Act that contains financial, commercial, scientific or technical information that is confidential information supplied to a government institution by a third party and is treated consistently in a confidential manner by the third party.

Pursuant to Paragraph 20 (1) (b) of the Act, NRCan will protect the applicant's confidential information supplied to NRCan from disclosure if:

- The applicant's information supplied to NRCan contains financial, commercial, scientific, or technical information; and
- The applicant consistently treats such information in a confidential manner.

Information provided by a Proponent to NRCan under a contribution agreement is kept confidential and not shared with third parties unless discussed and agreed to with the proponent.

When completing the Full Project Proposal form, please ensure that all feedback received in the formal invitation to submit a Full Project Proposal is addressed throughout the application.

PART 1. APPLICANT AND PROJECT DETAILS

Applicant Information

Legal name of the organization *
If you are a legal entity incorporated or registered in Canada, attach a copy of your articles of incorporation or registration
Organization type *
Business number
Province/territory of incorporation *
Legal name of the parent organization
Applicant Primary Contact
First name *
Last name *
Position/title *
Preferred language *
Email *
Telephone no. *
Extension
Mobile telephone no.
Applicant Secondary Contact
First name
Last name
Position/title
Preferred language
Email
Telephone no.
Extension
Mobile telephone no.

Applicant Organization Mailing Address

Street no. *
Street name*
Street type*
Suite/unit no.
City *
Province/territory *
Postal code * Main telephone no. *
Number of years the organization has been in operation, i.e., since it
was incorporated or became a registered legal entity in Canada. *
Former name of the organization if it was previously operating under a different name.

Any legal action currently underway or anticipated in the near future against the applicant, parent companies, or any partner, including any potential related financial loss. (500-character limit)

Indigenous Ownership, Partnerships, Representation, or Engagement

Please select how your project supports Indigenous ownership, partnerships, representation, or engagement (select all that apply).

Note: This section of the application is meant for applicants to concisely identify any Indigenous ownership, partnerships, representation, and/or engagement within the organization or project. Part 8 of the application will provide a larger text box for applicants to provide a more detailed explanation of their Duty to Consult, and requests information on the Indigenous groups that may be affected by your project and whether you have interacted with any Indigenous groups for your project. In instances where there is crossover in your response to both sections, please refer to the other section in your response.

- Ownership representation: Organization and/or project ownership structure includes representation of Indigenous people.
- <u>Partnerships</u>: The project is delivered in partnership(s) with Indigenous organizations or communities, with Indigenous partners directly benefiting from the project (financially or otherwise).
- <u>Team representation</u>: The team includes representation of Indigenous people.
- <u>Engagement</u>: Indigenous governments, Nations and/or communities have been engaged in the project. Engagement can include but is not limited to: regular communication, consultation, participation in project-related activities (planning, review, employment, etc.).

Note: The term "Indigenous" is understood to include Inuit, Métis, First Nations, Status Indian and non-Status Indian individuals, or any combination thereof.

Ownership representation

Partnerships

Team representation

Engagement

Please provide a detailed description to support your selections above. Provide details such as the names of individuals, percent ownership, partner organizations or local communities, the timeline for establishing partnerships or engagement, methods of engagement, etc. Please provide any relevant supporting documentation (e.g., letters of support), as appropriate. If details have been provided in another section in this form, please refer to the section.

(2,000-character limit)

Project Information

Project Title

Primary project Province/Territory *

Primary project city/area *

Secondary project Province/Territory

Secondary project city/area

Project Type *

Current Technology Readiness Level *

Planned Technology Readiness Level at end of Funding *

Expected start date *

Must be no earlier than January 1, 2024

Expected completion date *

Must be no later than December 31, 2028

Project Description *

Describe the project, including the project scope, the technology or process to be developed or demonstrated, and the work to be undertaken during the program timeline.

(3,000-character limit)

Project Summary *

Provide a brief summary including 1) a brief description of the technology and planned application, 2) the major phases/steps of the project, 3) the overarching objective and planned results.

(1,000-character limit)

Government Funding and Collaboration *

If this project, or similar work by the applicant, has received other government funding, or collaborated with other federal entities (including Federal labs), either in Canada or internationally, describe the previous collaboration or funding. Include details such as: program and year, outcome, and how the previous funding or collaboration differs from or complements this proposal. This information helps us better understand how this work has progressed over time, as well as the interconnection between different projects or funding programs.

(If applicable) Please provide copies of funding agreements with other government agencies contributing to the project to confirm government funding sources.

(2,500-character limit)

Changes from Expression of Interest *

If any information about the project; project team and partners; project lead; funding requested or other important details have changed from the Expression of Interest (EOI) application, describe the changes and explain the reasons for these changes. It is critical that you fully explain the rationale for any changes since the EOI stage as these changes can have implications on project eligibility.

(2,000-character limit)

PART 2. TECHNOLOGY AND INNOVATION (15 POINTS)

Technical Merit *

Provide a technical description of the project that is suitable for assessment by an engineer with expertise in the technologies involved. Demonstrate that the technology or process has strong technical merit and is technically sound.

Note: You may attach one visual supporting document (e.g., block flow diagram, process flow diagram, or visual schematic) with the following specifications: 8.5"x11", 2-sided, no larger than 5MB.

(4,000-character limit)

Past Work *

Summarize past work (including intellectual property [IP], where relevant) that the project builds upon and refer to the results and conclusions of that past work that have been used in developing this project proposal. For earlier-stage projects, this may include studies, measurements, modeling, etc.

(1,500-character limit)

Innovation *

Describe how the technology, process, and/or research approach is i) innovative and novel and ii) addresses barriers or gaps in the current Canadian CCUS landscape. Gaps can include but are not limited to: market, data, regulatory, codes and standards (e.g., safety, measurement, monitoring and verification).

Provide justification and rationale for each.

(3,000-character limit)

Technology Readiness Level *

Using the Technology Readiness Level (TRL) definitions in the <u>Applicant's Guide</u>, describe i) your current and planned TRLs and ii) how your project will advance to the planned TRL at the end of funding. To justify your stated current and planned TRLs, refer specifically to the definitions provided in the Applicant's Guide.

(1,500-character limit)

PART 3. PROJECT IMPLEMENTATION (30 POINTS)

Sources of Funding *

Provide evidence that your organization has approved committing financial resources to the project or describe your plan and timeline for committing financial resources to the project. Where applicable, applicants are strongly encouraged to provide evidence that senior management within the relevant organization has approved committing financial resources to the project, which will help to demonstrate project readiness.

Provide evidence that your financial partners have approved committing financial resources to the project, or describe each financial partner's plans, conditions, and timelines for committing financial resources to the project. Include evidence of plans and agreed-upon amounts and timelines via letters of support where possible. Note that for any funding sources that are conditional on receiving NRCan funding, this must be clearly documented and conditional commitments (e.g., letters of support) should be provided as evidence.

Note: Please combine letters of support into 1 document. Letters of support should include the organization's name, name and signature of the individual representing the organization and endorsing the letter, amount and timeline of funding, type of contribution to the project (cash and in-kind), and any conditions that funding is dependent upon.

(3,000-character limit)

Budget *

First, please complete the provided Budget Template.

Second, explain why NRCan funding is required in order for the project to proceed. Discuss how potential cost overruns/underruns will be managed.

Note: If the funding request for NRCan is over the prescribed limit for the respective project type (Demo, R&D, or RSA) the project will score zero on this section. The limits can be found in Section 6 of the <u>Applicant's Guide</u>.

(3,000-character limit)

Workplan *

First, please complete the provided Statement of Work Template.

Second, please fill out this section to support the information provided in the Statement of Work Template. This section of the application is to help further contextualize any parts of the project that do not fit into the structure of the Statement of Work Template. This can include: the scope; activities; deliverables; schedule; milestones and associated timelines during the NRCan funding period; links to the objectives of the project; and identification of any tasks (e.g., permits, regulatory requirements) which must be completed before, during, and after NRCan funding.

Note: The project will score zero in this section if the workplan cannot be completed within the program timeline (within 4 years).

(3,000-character limit)

Team *

Describe the team members from the applicant organization who will be working on the project. For each team member, include name, organization, role in the project, and experience relevant to the project.

Describe the team members from partner organizations, if applicable, who will be working on the project. For each team member from partner organizations, include name, organization, role in the project, and experience relevant to the project.

Note: You may attach CVs for team members to support this section. If providing CVs, all CVs must be attached as one document.

(6,000-character limit)

Risk Assessment

Describe any notable project risks (financial, organizational, regulatory, public sensitivity, project timelines, environmental, other). For each relevant risk, describe the potential impact(s) of the risk(s), any mitigation strategies put in place, and how the mitigation strategy will reduce the impact(s). For any of the risk categories below that are not relevant, simply write "N/A".

Note: Selecting fewer risks in this section does not guarantee a greater score. This section will be evaluated based on the level of consideration for the potential risks and mitigation strategies rather than the number of risks identified.

Financial Risk *



Organizational Risk *

Operational or resource risks facing the applicant or partner organizations. (1,500-character limit)

Regulatory Risk *

Risks or uncertainty around whether regulations will support or enable project development. (1,500-character limit)

Public Sensitivity Risk *
Risk of public concern or lack of support for the project. (1,500-character limit)
Project Timeline Risk *
Risk that the project does not achieve milestones according to planned schedule. (1,500-character limit)
Environmental Risk *
Potential unintended environmental consequences related to emissions, waste, contamination, etc. (1,500-character limit)
Other Risk *
Any other identified risk that does not fall into the categories above (e.g. technical, legal, etc.). (2,000-character limit)

PART 4. STRATEGIC IMPACT (20 POINTS)

Preferred Project

Please select which (if any) of the following preferred criteria your project meets. You may select more than one option.

Enable permanent storage of CO2 (storage hubs/reservoir development) near key industrial areas that do not have storage capacity available

Explore storage opportunities in regions that are not yet well characterized

Enable planning of CO2 transportation and storage hubs

Support knowledge generation that informs and/or directly supports development of regulatory frameworks and codes and standards

Newly added since EOI: Project advances the current state of CCUS in line with identified priorities, plans and barriers/gaps at both a regional and federal level

If you selected one or more of the criteria above, provide justification for your selection below. Applicants are strongly encouraged to be specific with activities, milestones, or outputs from the project that will advance these criteria. Be sure to provide clear evidence to support each criterion you select.

(6,000-character limit)

Key Participants and Competitive Landscape *

Describe your:

- Key participants (e.g., audiences, collaborators, governing or industry associations, customers, etc.). Outline how the key participants were identified and how they will contribute to the objectives of the project. Describe any engagement that has been undertaken with the key participants to date, or planned future engagement.
- Competitive landscape and the advantages of your approach/technology/process over others. If this is not applicable to your project, please provide rationale.

(2,500-character limit)

Path to Scale *

Describe your plan to scale your impact directly after completion of the proposed project and longer-term.

[Demo]: Describe your strategy related to i) replication / scale-up of your technology / process, including integration with supporting infrastructure (transport / storage) and CO2 capture streams, ii) capital attraction / revenue generation (e.g., licensing technology, technology as a service, product sales, carbon offset sales, etc.), and iii) measurement, monitoring and verification (MMV). For any that are not relevant, please provide justification.

[R&D]: Describe your strategy related to i) replication / scale-up of your technology / process / research, including integration with supporting infrastructure (transport / storage) and CO2 capture streams, ii) capital attraction / revenue generation (e.g., licensing technology, technology as a service, product sales, carbon offset sales, etc.), iii) knowledge dissemination and application of your research to future projects, and iv) measurement, monitoring and verification (MMV). For any that are not relevant, please provide justification.

[RSA]: Describe your plan for i) replication / scale-up of your research ii) knowledge dissemination and application of your research to future projects, and iii) capital attraction / revenue generation. For any that are not relevant, please provide justification.

(2,500-character limit)

PART 5. GHG REDUCTION POTENTIAL (20 POINTS)

GHG Impact

Due to the wide range of eligible projects and activities under this call, it is not expected that all projects will be able to provide all the metrics listed below. Please complete Section 1 in accordance with your project's scope and use the text box in Section 2 to justify your rationale and any exclusions.

Section 1: Provide the metrics that are relevant for your project below.

- A. What is the magnitude of captured carbon that the project will enable for storage or transportation (tCO2e/year)?
- B. What is the magnitude of the transport or storage capacity that can be realized through this project (tCO2e/year)?
- C. Further to question B above, what are the timelines for the project to achieve its transport or storage capacity? (est. year)
- D. What is the storage capacity in the reservoir being characterised through the project (estimated or known) (tCO2e)?

Section 2: Use the text box below to provide supporting calculations, and to state and justify any assumptions *

- For projects that responded to A, please outline: the names, proximity, and scale of carbon capture facilities that this project will/could enable. If there are not yet capture facilities within proximity of the project, describe the names, proximity and magnitude of emissions sources and justify assumptions around when these emissions could be captured and therefore available for transportation or storage.
- For projects that responded to B and where the expected transport and storage capacity exceeds the carbon capture sources listed in A, provide more details on how and when this excess capacity will be utilized in the future.
- For enabling projects that are unable to quantify any of the above (A to D), please qualitatively describe how your project will enable carbon storage and/or transportation, taking into consideration industries and end-uses.

(5,000-character limit)

PART 6. OTHER BENEFITS (15 POINTS)

Benefits to Canadian Cleantech Ecosystem *

For each area that applies to your project, please provide details as outlined below:

- IP Generation: Describe i) any IP this project is expected to generate in Canada and globally, and how it will support scale-up in Canada; ii) if IP generated is not anticipated to be Canadian, how the IP will be impactful to Canadian industries, iii) the IP arrangement between the applicant, technology providers, and/or other partners (where applicable), iv) how the IP will be protected. If the project is not intended to generate IP, please provide a description of your rationale.
- Codes, standards, and regulation: Describe how the project will contribute to the establishment or enhancement of codes and standards (e.g., safety, measurement, and verification), or will contribute to the development of policy or regulations. If the project is not intended to contribute to codes and standards, please provide a description of your rationale.
- **Other benefits**: Describe any other benefits of the project to the Canadian cleantech ecosystem (e.g., publicly available information to support future research and innovation).

(3,000-character limit)

Social and Economic Benefits *

Describe economic and/or social benefits this project is expected to generate for Canada and/or Canadians, including:

- Benefits to local communities;
- How local communities have been engaged or consulted in the development of the project;
- Estimated numbers of jobs created and/or supported, including highly qualified and skilled personnel positions; and
- Economic sectors that will be supported, including considerations for Canada's strengths and competitive advantages.

For each of these stated benefits, state and justify any assumptions. Specify whether expected results are direct or indirect, as well as the anticipated pathway and timeline for results to accrue. Provide evidence where possible (e.g., agreements, contracts, etc.)

(2,000-character limit)

Other Environmental Benefits *

Describe other environmental benefits this project is expected to generate for Canada and globally (e.g., water, land use, waste reduction, air emissions impacts, etc.), including the anticipated pathway and timeline for results to accrue. *Note: GHG impacts are covered in Part 5. Please do not include GHG impacts in this section.* (2,000-character limit)

PART 7. IMPACT ASSESSMENT ACT

Under the *Impact Assessment Act* (IAA) 2019, NRCan is required to assess whether projects that it may fund, carried out in whole or in part on federal lands or outside Canada, are likely to cause significant adverse environmental effects.

Will this project be carried out in whole or in part on federal lands or outside Canada (sections 82 and 83 of the IAA)? *

Confirm the status of ownership of the project site(s) and justify the selection. * (3,000-character limit)

Will this project's activities meet the definition of a "project" as per section 81 of the IAA, i.e., a physical activity in relation to a physical work? *

If this project will be carried out in whole or in part on federal lands or outside Canada, an impact assessment may be required. Identify and briefly describe which specific project activities including, but not limited to, site preparation, construction, installation, modification, operation, decommissioning, or abandonment (if any) will be carried out on federal lands or outside Canada. (5,000-character limit)

PART 8. DUTY TO CONSULT

NRCan has a duty to consult with Indigenous groups when a contemplated Crown conduct, such as the provision of funding or the issuance of permits, may have an adverse impact on existing or potential Aboriginal or Treaty rights.

To assess consultation requirements, and using the Aboriginal and Treaty Rights Information System (https://sidait-atris.aadnc-aandc.gc.ca/atris_online/home-accueil.aspx?lang=en), identify the Indigenous groups that may be affected by your project. Also identify any Indigenous groups you have interacted with on your project and describe the type and frequency of the interactions. If you have not interacted with any Indigenous groups, explain why. *

Note: There may be some overlap between this section and the "Indigenous Ownership, Partnerships, Representation, or Engagement" portion of question in Part 1 of the application. In instances where there is crossover between both sections, please refer to the other section in your response.

(5,000-character limit)

PART 9. DECLARATIONS AND SUBMISSION CHECKLIST

The applicant hereby:

- 1. Attests that it is legally registered or incorporated in Canada. *
- 2. Attests that the information provided is true and accurate to the best of their knowledge. *
- 3. Attests that it is the owner of all information—proprietary, confidential, or otherwise—provided as part of the submission, or, if the information belongs to another party, that it has obtained written consent to disclose the information to NRCan. *
- 4. Understands that any costs incurred for the submission of the application are at the applicants' own risk. *
- 5. Understands that NRCan reserves the right to alter the currently envisaged process, funding amounts, and deadlines, or to cancel the entire application process at its sole discretion. *
- 6. Understands that project funding decisions will only be made following receipt, review, and selection of full project proposals. *
- 7. Understands and acknowledges that no liability and no commitment or obligation exists on the part of NRCan to make a financial contribution to the project until a written contribution agreement is signed by both parties. *
- 8. Understands that reviewers are bound by the requirements of the *Access to Information Act* and the *Privacy Act* regarding the treatment of confidential information. *
- 9. Do you agree for NRCan to share this application, and any other submitted supplemental material, with other funding entities of:

The Government of Canada*

The Provincial, Territorial, or Municipal Governments*

The Not-for-Profit sector such as Sustainable Development Technology Canada (SDTC) *

- 10. I acknowledge that by submitting an application to the Program, I am consenting to NRCan sharing this proposal and any other information provided as supplemental material as part of this proposal with the Government of Canada's Clean Growth Hub. The Clean Growth Hub is a whole-of-government focal point for clean technology focused on supporting companies and projects. *
- 11. My organization does not conduct business dealings in any country against which Canada has imposed economic sanctions under the *United Nations Act, Special Economic Measures Act,* or the *Justice for Victims of Foreign Corrupt Officials (Sergei Magnitsky Law).* (See https://www.international.gc.ca/world-monde/international-relations-internationales/sanctions/current-actuelles.aspx?lang=eng) If this declaration is left unchecked, it does not mean that your application will be automatically disqualified. You will be contacted by a representative from OERD for additional information that may impact the eligibility of your application.
- 12. My organization does not conduct business dealings with any persons that are listed in Canada's sanctions legislation under the *United Nations Act, Special Economic Measures Act,* or the *Justice for Victims of Foreign Corrupt Officials (Sergei Magnitsky Law).* *
- 13. My organization is not owned, or directly or indirectly held or controlled by a person (individual or corporate entity) that is listed in Canada's sanctions legislation under the *United Nations Act, Special Economic Measures Act*, or the *Justice for Victims of Foreign Corrupt Officials* (*Sergei Magnitsky Law*). * For greater certainty, this would include shareholders or corporate entities anywhere in your corporate structure that are sanctioned under the aforementioned legislation.
- 14. My organization acknowledges and agrees that there will be legally binding obligations in the Contribution Agreement to prohibit any business dealings with, and to have any entity in, the corporate structure owned, held or controlled by any persons that are listed in Canada's sanctions legislation (currently or in the future) under the *United Nations Act, Special Economic Measures Act*, or the *Justice for Victims of Foreign Corrupt Officials* (*Sergei Magnitsky Law*). *

SUBMISSION CHECKLIST

Send the completed application package in appropriately named attachments to the CCUS-EIP mailbox, <u>eip-ccus.pie-cusc@nrcan-rncan.gc.ca</u>, by **4:00p.m. ET on October 23, 2023**. For your application to be considered eligible, you are responsible for ensuring that your application is fully completed and properly submitted on time.

Your complete package must include:

- Project Proposal form
- Budget and Statement of Work Template
- Letters of Support for project partners and financial contributors (all Letters of Support must be submitted together as a single PDF document)
- If you are a legal entity incorporated or registered in Canada, attach a copy of your articles of incorporation or registration
- (If applicable) Evidence that senior management within the applicant organization has approved committing financial resources to the project
- (If applicable) Copies of funding agreements with other government agencies contributing to the project, to confirm government funding sources
- (Optional) A maximum of one visual supporting document (e.g., block flow diagram, process flow diagram, or visual schematic) with the following specifications: 8.5"x11", 2-sided, no larger than 5MB
- (Optional) Resumes or CVs of team members and partners (all Resumes and CVs must be attached together as a single PDF document)