

# Measurement Monitoring and Verification (MMV) of Carbon Management Applicant Guide

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BC Centre for Innovation and Clean Energy (CICE)

MMV2023@cice.ca



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## Introduction

To achieve net-zero emissions, the implementation and growth of carbon management solutions, including nature-based, engineered, and hybrid approaches, are vital. The scalability of these solutions is enhanced by market and policy accelerants, more notably, the increasing global carbon markets, where companies are actively purchasing carbon removal credits as part of their efforts to address climate change and achieve their emission targets.

Robust measuring, monitoring, and verification (MMV) plans are pivotal in creating efficient carbon markets to assess emission reductions, removals and avoidance, and unlock carbon/climate financing.

British Columbia has a unique opportunity to lead in advancing carbon management solutions by establishing MMV pathways and innovations. With this vision, the <u>BC Centre for Innovation and Clean</u> <u>Energy</u> (CICE) is inviting proposals and will award up to \$3 million in non-dilutive funding to BC-based innovators to develop commercial pathways for MMV technologies, services, and business models.

This Applicant Guide describes the CICE call for innovation focused on measuring, monitoring, and verification pathways and innovations for carbon management solutions. It outlines the objectives and constraints of the MMV call for innovation, as well as the application and evaluation processes. This document is intended to provide guidance to applicants and is not in itself binding in any way.

## 2023 MMV of Carbon Management Program Priorities

CICE is focused on taking action to secure a low-carbon future. Together with our members and BC's brightest innovators, leading corporations, academic institutions, policy makers, investment groups and Indigenous communities, we endeavor to expand the possibilities of clean energy innovation like the future of the planet depends on it. Because it does.

This means our first and most important objective is to identify high impact projects that accelerate the reduction of global greenhouse gases (GHGs) and enable a net-negative emissions future. With a changing climate, these projects will also contribute to a comprehensive understanding of their impact on emission removal, reduction, and avoidance to unlock the potential of innovative carbon management solutions.

Our second priority is supporting BC innovators (working on either technology or business model solutions) as they grow and amplify their impact by scaling from first demonstration to local, repeated implementation, and potentially to global deployment.



## **Project Funding**

**CICE is awarding up to \$3 million in non-dilutive funding for project proposals from BC-based companies that build meaningful MMV capacities for carbon management solutions.** This total budget allocation may be distributed between multiple projects at our discretion, depending upon the strength and number of proposals received. While proponents may request up to \$3 million per project, preference will be given to requests lower than \$750K to accommodate multiple solutions. CICE reserves the right to not fund any projects. CICE will contribute funding to projects in the form of non-repayable grants, paid in increments upon successful completion of project milestones.

## Who can apply?

CICE will accept applications for project funding from companies with a BC presence. Companies must demonstrate their ability to complete the proposed project with sound management, operational capability, and overall financial support to advance the commercial potential of the company.

CICE is particularly interested in supporting projects that develop and scale the verification of carbon management solutions, whose innovation can be replicated across multiple jurisdictions to enable global climate impact.

Occasionally, innovative projects may be proposed by groups that are not incorporated entities. While such proponents can be accepted, the additional requirements for demonstrating management, operational, and financial capabilities to complete the project will be required.

Consortia of companies working together to complete a project are acceptable and welcomed. In such cases a single lead company should become the applicant.

This program is focused on companies located in BC; however, CICE will consider applications from companies based outside of the province with presence or a project in BC.

## What projects are eligible?

The 2023 call for MMV of carbon management proposals provides an opportunity for furthering commercial development of solutions to problems related to verifying and quantifying emission avoidance, removals, and reductions in BC. CICE will favour proposals which lead to implemented solutions in the following areas:

- Commercially viable pathways that enhance the MMV of engineered, nature-based, or hybrid carbon management pathways
- Proposals that include data management platforms to enhance the commercialization of naturebased, engineered, and hybrid carbon management solutions



- Proposals that monitor and enhance long-term carbon storage via mineralization or geological sequestration
- Commercialization opportunities of the monitoring of ocean carbon capture and removal technologies
- Methodology and technology development in understanding carbon sequestration potential of coastal carbon management and blue carbon solutions
- Proposals that include pathways for monitoring or measuring forestry management solutions
- Commercially viable pathways for enhancing soil carbon removal and reduction technologies

Proposals that go beyond the aforementioned solutions and exhibit climate impact will be considered. Additionally, project activities may include, but are not limited to, demonstrations and pilot projects, innovative implementation solutions, novel linkage of system components, mitigation or monitoring technologies, and business model innovations.

## How can project funds be used?

To comply with CICE's mandate, favoured projects will fall between <u>Technology Readiness Level</u> (TRL) 4-9. Proposals must include a plan for regulatory approvals that is aligned with their proposed timeframe for implementation. Projects must start within 6 months of executed funding agreement dates. Proposals for feasibility and front-end engineering design (FEED) studies will be contemplated, but considered behind projects that have near term applications. Preference will be given to projects that empower Indigenous carbon management solutions in BC.

Project funds can be used to pay salaries, consultants, and reasonable direct costs of project management. Funds can also be used to secure demonstration sites (including the operating costs of demonstrations), build prototypes, integrate system components, demonstrate pilot production, or scale up manufacturing.

Project funds **cannot** be used to enhance normal business operational capabilities, purchase capital equipment that is indirectly related to and not core to the proposed innovation, perform capital or leasehold improvements or purchase furniture or other equipment to be used in the routine course of business. Project funds cannot be used for advertising or other forms of business promotion. Human resource costs cannot be 'marked up' to include blanket overheads.

Project funding will be aligned with a contribution agreement between the proponent and CICE that will be negotiated as part of the final award process. Project funding will be paid against completion of milestones. Project funding will be withdrawn in the event projects are significantly delayed or milestone objectives are not adequately met.



## **Application Process**



A staged application process will be used to funnel project proposals from initial inquiry to final evaluation, as outlined below.

#### **STAGE 1: EXPRESSION OF INTEREST**

The first stage of proposal includes an expression of interest (EOI) that requires a short video to explain basic details about the proposed project and short-form project description. This application style is meant to provide an accessible platform to deliver an oral summary of the project. Video quality and production elements will not be evaluated or prioritized in the decision process. A short outline form will also be submitted via a web-based application form that will be available on CICE's website June 29, 2023. At this stage, CICE expects submissions to involve non-confidential disclosures submitted without a requirement for any non-disclosure agreement. We encourage participants to refer to the project evaluation criteria as guidance in preparing for submission.

#### GENERAL WRITTEN INFORMATION FOR EXPRESSION OF INTEREST

Company name and location Main contact and contact details Project title Short summary Project location Estimated total project cost Funds requested from CICE/CGIF Funding requested start date Funding estimated end date

#### **VIDEO SUBMISSION**

#### More about your video submission

Proponents are required to submit a simple, 5-minute video that provides an overview of the project, including:



- a. Project title and short project description. What innovation are you developing? How is it unique? How does your solution address current challenges or gaps in measuring, monitoring and verifying carbon management solutions?
- b. What are you requesting for funding? What funding is currently secured? How could CICE funds be used to accelerate the project?
- c. What is the commercial status of your innovation? What is the commercial business model and business plan, and who are your current customers or customer under contract? How will the status of the technology change over the duration of the project?
- d. How do you plan to scale/commercialize your innovation, and what kind of partnerships or collaborations are in place or planned to achieve this? Describe how this project impacts the commercialization of BC-based innovation.
- e. Describe how the technology or innovation impacts or enables GHG emissions reductions.
- f. Describe the diversity in position of leadership at the project level.
- g. Further the elaboration on lifecycle emissions considered in the solution. Describe any implementation of your solution. What controls do you have in place to ensure the validity of your data?

#### Videos will be uploaded via the web-based application form.

Stage 1 evaluation will consist of a preliminary review of proposal details to ensure eligibility against program requirements. Eligible projects will undergo a competitive review of the proposed projects against the CICE evaluation criteria as well as in comparison to all other project proposals submitted. In some cases, we may contact the applicants to request additional information related to the project proposal. A limited number of project proposals will be invited to execute a confidentiality agreement and proceed to Stage 2.

#### STAGE 2: DETAILED PROPOSAL SUBMISSION AND REVIEW

This stage includes preparation and submission of a detailed proposal by the proponents, detailed due diligence, third-party assessments conducted by experts, and multiple engagements with the CICE project review team.

CICE will provide Stage 2 applicants with a document template for the detailed proposal submission. Applicants will be required to enter into a confidentiality agreement with CICE and CGIF before confidential or detailed information on the project is submitted.

Upon review of the written submission, CICE may elect to conduct a review meeting with project proponents and request further documentation to support the project proposal.



Project proposals will be reviewed against CICE evaluation criteria and will be ranked competitively with other Stage 2 project proposals. CICE and the third-party reviewers will assess proposals independently and in relation to each other to identify projects to be funded under the program. Multiple projects may be funded, with funding amounts determined by the requirements of each project.

Successful project proposals will be subject to a final stage of due diligence review after which they may proceed to Stage 3.

#### **STAGE 3: DECISION COMMUNICATED**

Successful project proponents will work with CICE to develop and agree on a contribution agreement which will identify obligations of all parties and will become a binding agreement governing the relationship between CICE and the project proponent(s). The contribution agreements will also include key milestones for release of funds and reporting requirements.

## **Project Evaluation Criteria**

CICE will lead the project intake, review, and evaluation. Projects will be evaluated by CICE staff and subject matter experts. The following lists the seven major decision criteria which will be applied to project proposals:

#### 1. Strategic Alignment

- The project furthers the commercialization of a technology or business model innovation that can significantly impact the way carbon emission reductions or removals are measured, monitored, or verified, with the ability to be applied at multiple sites within the province.
- The technology or business model innovation is validated, developed, and commercialized by either a BC-based company or through a project completed in BC.

#### 2. Team Strength

- The application presents a strong management team with the required skills for growth aspiration.
- The team possesses a depth of knowledge on what is required to successfully scale their solution.

#### 3. Technology Viability

- The overall plan for technology development is realistic.
- Barriers have been identified and plans to overcome barriers have clear and measurable targets.
- Regulatory, permitting and IP ownership issues are addressed to enable project implementation.

#### 4. Regulatory Compliance



- The overall proposal is feasible within the existing regulatory frameworks of the province.
- Proposals and plans for permitting are realistic and provide opportunity for timely project development.

#### 5. Corporate Readiness

- Teams have a finance framework in place to partially fund and scale the opportunity.
- No encumbrances or other liabilities exist to prevent implementation and scaling.
- Planned partnership agreements are in place.

#### 6. Plan Readiness

- Project outcomes lead to a scaling opportunity for the business.
- A development plan, including assumptions for market readiness and financing is in place.

#### 7. Social Impact

• Overall environmental, social and governance impact benefits are shown, including impact on Indigenous communities and enhancement of diversity, equity, and inclusion.

Date	Event
June 13, 2023	Program Announcement
June 27, 2023, at 10:00am PT	Virtual Q&A Session
June 29, 2023, at 8:00am PT	Program Start Date – Open to receive Expression of Interest
July 28, 2023, at 12:00pm PT	Deadline for submission of Expression of Interest
August 4, 2023	Notification of Stage 1 outcome, invitation for successful projects to advance to Stage 2
August 24, 2023, at 5:00pm PT	Deadline for submission of detailed proposals
September 29, 2023	Stage 3 invitation to successful applicants
October 6, 2023	Execution of contribution agreements, projects start

## Schedule



## About CICE

The British Columbia Centre for Innovation and Clean Energy (CICE) is an independent, not-for-profit corporation that helps fund the development, commercialization and scaling of made-in-B.C. clean energy technologies and solutions – from Canada to the world. We unite BC innovators, leading corporations, government, academia, communities, and Indigenous rights holders around one primary focus: Advancing the world towards a net-zero carbon future.

Together with our members, we expand the possibilities of clean energy innovation like the future of the planet depends on it. Because it does. To learn how CICE is fast-tracking credible world-class technologies and solutions with high impact potential in battery technology and energy storage, carbon management, low-carbon bio and synthetic fuels, and low carbon hydrogen, visit <u>www.cice.ca</u>