



Forestry Residue Management Applicant Guide

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BC Centre for Innovation and Clean Energy (CICE) and FortisBC Clean Growth Innovation Fund (CGIF)

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Introduction

Forest residue management is a long-standing challenge in British Columbia (BC) requiring innovation to enable commercial incentivization of the collection, transport, and processing of forestry residues. This has proven difficult due to the low economic value of residues, difficult terrain, and long transportation distances.

Historically, approximately 4,600,000 green metric tonnes of BC's wood fibre resources have been stacked into slash piles and burned on site annually, increasing emissions and eliminating other utilization options. Wildfire risk and associated emissions are rising due to a changing climate, with 150-200 million tonnes of CO2e emitted from BC wildfires during each of the high fire years of 2017, 2018 and 2021. In addition to direct emissions, wildfires kill trees that will decay over time releasing carbon at similar scales to the direct emissions from the fires. With a need to actively manage forests for wildfire prevention, thinning will increase the amount of residue in BC's forests.

Through this Call for Innovation, the <u>BC Centre for Innovation and Clean Energy</u> (CICE) and <u>FortisBC Clean Growth Innovation Fund</u> (CGIF) will award up to \$6 million in non-dilutive grant contributions. CICE and CGIF invite innovators to submit proposals that outline clear commercial pathways to increase resilience in BC's forests by strengthening value chains, diversifying utilization opportunities, and managing carbon.

This Applicant Guide describes the 2023 CICE and CGIF Call for Innovation focused on forestry residue management. The document outlines the objectives and constraints of the Call, 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 Forestry Residue Management Program Priorities

CICE is focused on taking action to secure a low-carbon future. We are expanding the possibilities of clean energy innovation like the future of the planet depends on it. Because it does.

The FortisBC CGIF is focused on finding solutions that will help decarbonize its natural gas system. It seeks solutions that will create low-carbon intensity gaseous fuels and sequester carbon.

The first and most important objective of the forestry Residue Management Program 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 the resilience and adaptability of BC's forest, with long-term positive impacts for the environment.

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

Project Funding

In this call, CICE and CGIF anticipate awarding up to \$3 million each, for a total of \$6 million in non-dilutive funding. 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 and CGIF reserve the right to not fund any projects. CICE and CGIF will contribute funding to projects in the form of non-repayable grants, paid in increments upon successful completion of project milestones. Generally, an individual project will be supported by either CICE or CGIF depending on alignment with each's program priorities.

Who can apply?

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

CICE and CGIF are particularly interested in supporting projects that drive development of locally operating companies whose work can be replicated across multiple sites within the province. Preference will be shown to projects with strong Indigenous ownership or participation.

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 be the applicant.



This program is focused on companies located in BC but will allow participation of companies outside of the province with presence or a project in BC.

What projects are eligible?

The 2023 Call for Innovation focused on forestry residue management provides an opportunity for furthering commercial development of solutions to problems related to the management and utilization of forestry residues in BC. CICE and CGIF will favour proposals which lead to implemented solutions in the following areas:

- Commercially viable pathways for collection, transportation, and management of forestry residue, including opportunities for slash and thinning by-products to reduce wildfire risks
- Diversification of utilization solutions to derive energy value from forestry residue, such as biogases, advanced biofuels, and other scalable end-use products
- Proposals that align forest management with carbon-based innovations, such as nature-based solutions, bioenergy with carbon capture utilization and storage (BECCUS), and other potentially negative-emission technologies

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.

CICE and CGIF will prioritize regional approaches and commercial plans with potential to be scaled across multiple sites. Favoured projects will fall between Technology Readiness Level (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 signing the contribution agreement. 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 forest management and remote communities in BC.

How can project funds be used?

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 and 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.

Projects must be started within 6 months of signing a contribution agreement. 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;
- Paid against completion of milestones;
- 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 above.

STAGE 1: EXPRESSION OF INTEREST

The first stage of proposal includes an expression of interest (EOI) application that requires a short video to explain basic details about the proposed project. 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 written form will also be required as part of the EOI and will be submitted with the video via a web-based application form that will be available on CICE's website June 26, 2023. At this stage, CICE and CGIF expect 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 REQUIRED 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

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

- a. What innovation are you developing? How is it unique? How does your solution address current challenges or gaps in forestry residue management practices in BC?
- b. What are you requesting for funding? What funding is currently secured? How would CICE and CGIF 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 under contract? How will the status of the technology change over the duration of the project?
- d. What impact do you expect your innovation to have (or what impact has it had) on GHG emissions reduction? How do you see your innovation contributing to the broader goals of sustainability and wildfire mitigation in BC's forestry industry?
- e. Who is your target customer and what is your long-term go-to-market strategy? What is the positioning of your technology or innovation in the current competitive landscape? What is your competitive differentiation?
- f. How do you plan to scale / commercialize your innovation, and what kind of partnerships or collaborations are in place or planned to achieve this? How would your innovation benefit Indigenous and remote communities in BC?



- g. Please describe the diversity in positions of leadership at the project level.
- h. What steps have you taken to ensure compliance with regulatory mandates? What is the estimated timeline for securing any remaining permits?

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 and CGIF 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 before confidential or detailed information on the project is submitted.

Upon review of the written submission, CICE and CGIF 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 and CGIF 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. While CICE and CGIF are aligned in identifying opportunities, final project selection will occur independently, with no formal coupling of funds. 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 with either CICE or CGIF, depending on alignment with either program.



STAGE 3: DECISION COMMUNICATED

Successful project proponents will work with CICE or CGIF 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 or CGIF 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. CICE and CGIF will come together in the final phase of project selection to identify successful projects. Projects selected will in general be funded either by CICE or by CGIF with independent contribution agreements. 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 forest residues are accumulated, managed, and utilized, 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.
- The innovation leads to significant GHG reduction 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.
- o Co-funding secured, or planned partnership agreements are in place.

6. Plan Readiness

- o 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.



Schedule

Date	Event
June 8 th , 2023	Program Announcement
June 22 nd , 2023, at 10:00am PT	Virtual Q&A Session
June 26 th , 2023, at 8:00am PT	Program Start Date - Open to receive Expression of Interest applications
August 18 th , 2023, at 12:00pm PT	Deadline for submission of Expression of Interest
August 25 th , 2023	Notification of Stage 1 outcome, invitation for successful projects to advance to Stage 2
September 15 th , 2023, at 5:00pm PT	Deadline for submission of detailed proposals
October 20 th , 2023	Stage 3 invitation to successful applicants
October 27 th , 2023	Execution of contribution agreements, projects start

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 B.C. 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 and energy storage, carbon management, low-carbon bio and synthetic fuels, and low carbon hydrogen, visit www.cice.ca



About FortisBC and the CGIF

FortisBC is a Canadian-owned, BC-based company with more than 2,500 employees across the province. We proudly deliver renewable energy, natural gas and electricity to 1.2 million customers in 135 BC communities, and 58 First Nations communities across 150 Traditional Territories. Through the Clean Growth Innovation Fund and other initiatives, FortisBC is investing in a lower-carbon energy future by driving forward with innovative solutions like delivering renewable and low carbon gases to our customers and offering new energy-efficient technologies for BC homes and businesses. As an electricity provider, we will continue to provide our customers in the Southern Interior with clean, renewable energy today and for years to come.